98US-0080334P. 98US-0081049P. 98US-0081070P.

98US-0080333P

98US-0081203P. 98US-0081229P.

38US-0081817P

98US-0081838P. 98US-0081952P. 98US-0081955P. 98US-0082569P. 98US-0082704P.

```
The present invention describes secreted and transmembrane polypeptides and their polymucleotides. The nucleotide sequences are useful as sources of probes, primers, for chromosome mapping, and for generation of antisense sequences. They can also be used to create transgenic animals. The proteins can be used to treat a variety of diseases and disorders, depending on their function. Diseases that may be treated include blood coagulation disorders, cancers and cellular adhesion disorders. They may also be used to raise antibodies. AAZ33891 to AAZ34338, and AAX41685 to AAX41774 represent polymucleoride and polypeptide sequence given in the exemplification of the present invention.
                        Claim 12; Fig 149; 530pp; English.
                                                                                                                                                                                                                                                                                                                                                                                          Sequence 111 AA;
XXX000000000000XX
```

```
ö
                                                                                                                                         1 MSLLPRRAPPVSMRLLAAALLLLLLALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKY 60
                                                                                                                                                                                                    1 MSLLPRRAPPVSMRLLAAALLLLLLLALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKY 60
                                                                      0; Gaps
                                                                                                                                                                                                                                                                              61 PHCEEKMVIITTKSVSRYRGQEHCLHPKLQSTKRFIKWYNAWNEKRRVYEE 111
                                                                                                                                                                                                                                                                                                                                  61 PHCEERWVIITTKSVSRYRGQEHCLHPKLQSTRRFIKWYNAWNEKRRVYEE 111
Ouery Match
100.0%; Score 587; DB 2; Length 111;
Best Local Similarity 100.0%; Pred. No. 8.9e-60;
Matches 111; Conservative 0; Mismatches 0; Indels (
       Query Match
Best Local Similarity
```

98US-0082804P. 98US-0082767P. 98US-0082796P. 98US-0083336P.

98US-0083322P. 98US-008349SP 98US-0083496P. 98US-0083500P 98US-008354SP 98US-0083558P. 98US-0083559F. 98US-0083742P 98US-0084366P.

#### RESULT 2

AAY28290 standard, protein; 111 AA

28-SEP-1999 (first entry)

98US-0084627P. 98US-0084640P

Tim-1 protein.

Chemokine; CXC; Tim-1; inflammation; heart attack; stroke; infection; ss; trauma; radiation; burns; frostbite; corrosive chemical; gene therapy.

Homo sapiens.

WO9933990-A1.

08-JUL-1999.

98WO-US026546. 14-DEC-1998; 97US-0068955P 30-DEC-1997;

> 98US-0085700P 98US-0085704P 98US-0086392P 98US-0086414P 98US-0086486P 98US-0087106P 98US-0087208P 98US-0100038P

(CHIR ) CHIRON CORP.

Chen II, Pot D, Kassam A;

WPI; 1999-430244/36. N-PSDB; AAX89708. Claim 1; Page 43; 46pp; English.

A new human CXC chemokine, Tim-1, useful for treating inflammation.

This is the amino acid sequence for the Tim-1 CXC chemokine. The Tim-1 gene can be used to design therapeutic tools for treating inflammation due to stimuli such as heart attacks and stroke, infection, physical trauma, UV or ionizing radiation, burns, frostbite or corrosive chemicals. The Tim-1 gene and subgenomic polynucleotides can be used in 

gene therapy

Sequence 111 AA;

Query Match

New secreted and transmembrane polypeptides and their polynucleotides, useful for treating blood coagulation disorders, cancers and cellular adhesion disorders.

Wood WI, Goddard A, Gurney A, Yuan J, Baker KP, Chen J;

(GETH ) GENENTECH INC.

11-SEP-1998;

22-MAY-1998

WPI; 1999-551358/46. N-PSDB; AAZ34205. 100.0%; Score 587; DB 2; Length 111;

```
Apr 26 15:46:52 2004
```

ö 1 MSLLPRRAPPVSMRLLAAALLILLLALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKY 60 1 MSLLPRRAPPVSMRLLAAALLLLLLLALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKY 60 0; Gaps 61 PHCEEKMVIITTKSVSRYRGQEHCLHPKLQSTKRFIKWYNAMNEKRRVYEE 111 PHCEEXWVIITTKSVSRYRGQEHCLHPKLQSTKRFIKWYNANNEKRRVYEE 111 Indels Best Local Similarity 100.0%; Fred. No. 8.9e-60; Matches 111; Conservative 0; Mismatches 0; ≿ ŏ ⋩

RESULT 3

AAB33423 standard; protein; 111 AA.

AAB33423;

29-JAN-2001

Human PRO273 protein UNQ240 SEQ ID NO:46.

(first entry)

dermatological, antiarthritic, antirheumatic; immunosuppressive; haemostatic, antithyroid; antidiabetic; noctopic; neuroprotective; antianaemic; hepatotropic; virucide, antipsoriatic; antiallergic; antialergic; antialergic; antialergic; antialergic; antialergic; systemic lupus erythematosus; rheumatoid arthritis; osteoarthritis; spondyloarthropathy; systemic solerosis; sarcoidosis; systemic vasculitis; autoimmune haemolytic anaemia; diabetes mellitus; systemic vasculitis; autoimmune haemolytic anaemia; diabetes mellitus; autoimmune thempolytic anaemia; diabetes mellitus; autoimmune diaemolytic anaemia; diabetes mellitus; inflammatory bowel disease; lamune-mediated renal disease; inflammatory bowel disease; gluten-sensitive enteropathy; autoimmune disease; immune-mediated skin disease; allergic disease; graft rejection; graft-versus-host-disease. Human; immune related disease; diagnosis; antiinflammatory; cardiant;

Homo sapiens.

WO200053758-A2.

14-SEP-2000.

2000WO-US005841. 02-MAR-2000;

12-MAR-1999 0-APR-1999 

39WO-US008615 39US-0131445P 99US-0132371P 99WO-US012252

9US-0144758P 99US-0145698P 99WO-US020111 99WO-US020594

99WO-US028409 9US-0162506P 99WO-US028313 9WO-US023 9WO-US023 9WO-US02 -SEP-

089

99WO-US028634

99WO-US028564

02-DEC-1999; 02-DEC-1999;

16-DEC-1999; 99WG-US030095. 20-DEC-1999; 99WG-US030099. 30-DEC-1999; 99WG-US03021274. 05-JAN-2000; 2000WG-US000219. 06-JAN-2000; 2000WG-US000217. 06-JAN-2000; 2000WG-US000376. 11-FEB-2000; 2000WG-US004341. 18-FEB-2000; 2000WG-US004342. 22-FEB-2000; 2000WG-US004342. 99WO-US028565 

(GETH ) GENENTECH INC.

Ashkenazi AJ, Baker KP, Goddard A, Gurney AL, Hebert C, Henzel W; Kabakoff RC, Lu Y, Pan J, Pennica D, Shelton DL, Smith V; Stewart TA, Tumas D, Watanabe CK, Wood WI, Yan M;

2000-572271/53. N-PSDB; AAC58588 Sixty four PRO polypeptides, useful in the diagnosis and treatment of immune related disorders, e.g. systemic lupus erythematosis, rheumatoid arthritis, osteoarthritis, thyroiditis and diabetes mellitus.

Claim 33; Fig 20; 309pp; English.

The present invention describes sixty four human PRO proteins which can be used in the treatment of immune related diseases. The human PRO proteins, anti-PRO antibodies, agonists and antagonists are useful for treating and disgnosing immune related disorders. The disorders are selected from systemic lupus erythematorsus, rheumatorid arthritis, osteoarthritis, juvenile chronic arthritis, spondyloarthropathies, systemic lupus erythematory myopathies, 5/9gren's systemic vasculitis, sarcoidosis, autoimmune haemolytic syndems, systemic vasculitis, sarcoidosis, autoimmune hamolytic immune-mediated renal disease, demyelinating diseases of the central and peripheral nervous systems, hepatobiliary diseases of the central and isease, gluten sensitive enteropathy and Whipple's disease, autoimmune or immune-mediated skin diseases, allergic diseases, immunological diseases of the lung, and transplantarion associated diseases including graft rejection and graft-versus-host-disease, Auc58397 to Auc58578 represent PR primers and hybridisation probes used in the isolation of them present invention sequences given in the exemplification of the present invention

Sequence 111 AA;

0; Gaps 100.0%; Score 587; DB 3; Length 111; 100.0%; Pred. No. 8.9e-60; Live 0; Mismatches 0; Indels 0 Query Match Best Local Similarity 100.[ Matches 111; Conservative

pp

à

61 PHCEEKMVIITTKSVSRYRGQEHCLHPKLQSTKRFIKWYMAWNEKRVYEE 111 61 PHCEEKMVIITTKSVSRYRGQEHCLHPKLQSTKRFIKWYNAMNEKRRVYEE 111 g à

AAB44295 standard; protein; 111 AA.

AAB44295;

08-FEB-2001 (first entry)

Human PRO273 (UNQ240) protein sequence SEQ ID NO:370.

Human, secreted protein, transmembrane protein, PRO, EST, cytostatic 

```
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          132 CCCGGGCGGCGCGCACGCACAGGCGGGCCCTCCTTGCCTCCTGCTCCC-CACGGGC 190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                311 AGCGACGTGAAGAAGATGGAATGAAGCCAAAGTACCCACACTGCGAGGAGGAGAGATGGTT 370
                                                                                                                                                                                                                                                                                                                                                                                                             71 GCCAGCAGAGCCGGAAGGCGCGCCCCGGGCAGAAAGCCGAGCAGAGCTGGGTGGCTC 130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             131 TCCGGGCCGCCGCTCCGACGGGCCAGCGCCCTCCCCATGTCCCTGCTCCCACGCCGCGCCC 190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCTCCGGTCAGCATGAGGCTCCTGGCGGCCGCGCTGCTCCTGCTGCTGCTGGCGCTGTAC 250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       191 CCTCCGGCCAGCAIGAGGCTCCTGGCGGCCGCTGCTGCTGCTGCTGCTGGCGCTGTGC 250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      251 ACCGCGCGTGTGCGACGGGTCCAAATGCAAGTGCTCCCGGAAGGGACCCAAGATCCGCTAC 310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               251 GCTTGGCGCGTGGACGGGTCCAAGTGTAGTGTTCCCGGAAGGGGGCCCAAGATCCGCTAC 310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   311 AGCGACGTGAAGAAGCTGGAAATGAAGCCAAAGTACCCGCACTGCGAGGAGAAGATGGTT 370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 431 CTGCAGAGCACCAAACGCTTCATCAAGTGGTACAATGCCTGGAACGAGAAGGGCAGGGTC 490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         491 TACGAAGAATAGGGTGAAAAACCTCAGAAGGGAAAACTCCAAACCAGTTGGGAGACTTGT 550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       551 GCAGAGGACTTTGCAGATT-----AAAATAA 576
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 611 AAAGCCTTTCTTTCTCACAGGCATAAGACACAAATTATATATTGTTATGAAGCACTTTTT 670
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                577 AAGCCCTTTCTTTCTCACAAGCATAAG--ACAAATTATATATTGCTATGAAGCTCTTCTT 634
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  671 ACCAACGGTCAGTTTTTACATTTTATAGCTGCGTGCGAAAGGCTTCCAGATGGGAGACCC 730
                                                                                                                                                                                                                                                                                                                                                                                                                                                            72 gegageceaagagagagagagecenecrngaaacceagaaccaagceggegere 131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   491 Taccaacaataacectoracaacaacaaaaaaaaaaacrocaeccacrocaecarcoca 550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           635 ACC-AGGGTCAGTTTTTACATTTTATAGCTGTGTGAAAGGCTTCCAGATGTGAGATCC 693
                                                                                                                                                                                                                                                                                                                     11 GCGCAGAGCGCAGCGCCACAGACAGCCCTGGGCATCCACCGACGGCGCAGCCGGA 70
                                                                                                                                                                                                                                                                                                                                                              13 GCGAAGGGCACCAGGCACCGCGACAGAC-GGCAGGAGCACCCATCGACGGGCGTACTGGA 71
                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                   39;
                                                                                                                                                                                                                     26.6%; Score 44%; DB 4; Length 764; 79.7%; Pred. No. 7.6e-96; Live 0; Mismatches 115; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            731 ATCTCTCTTGTGCTCCAGACTTCATCACAGGCTGCTTTTT 770
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           694 Agchicaccriscaccaccágacrircarracaagrascrirrir 733
CURRENT FILING DATE: 1999-05-14
NUMBER OF SEQ ID NOS: 425
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 263
LENGTH: 764
                                                                                                                                                                                                                                                                      606; Conservative
                                                                                                                                                                                                                                              Similarity
                                                                                                                          TYPE: DNA
ORGANISM: Mouse
                                                                                                                                                                   US-09-312-283C-263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 10
US-08-825-556A-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           191
                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                              Best Local
Matches 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                            q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
```

Sequence 1, Application US/08825556A Patent No. 5910431 GENERAL INFORMATION:
APPLICANT: Ni, Jian APPLICANT: Gentz, Reiner L.

```
190 CCCTCCGGTCAGCATGAGGCTCCTGGCGGCGCGCTGCTCCTGCTGCTGCTGCTGGCGCTGTA 249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            250 CACCGCGCGTGTGGACGGGTCCAAATGCAAGTGCTCCCGGAAGGGACCCCAAGATCCGCTA 309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           186 CAGCGACGTGAAGAAGCTGGAAATGAAGCCAAAGTACCCGCACTGCGAGAGAAAAGATGGT 245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        126 CACCGCGCGCGTGTGGACGGGTCCAAATGCAAGTGCTCCCGGAAGGGACCCAAGATCCGCTA 185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   310 CAGCGACGTGAAGAAGCTGGAAATGAAGCCAAAGTACCCGCACTGCGAGGAGAAGATGGT 369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 130 CTCCGGGCCGCCGCTCCGACGGGCCAGCGCCCTCCCCATGTCCCTGCTCCCACGCCGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             6 CTCCGGGGCGGCGCTCCGACGGGCCAGCGCCTCCCCATGTGCCTGCTGCTCCCACGCGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 66 ecchecagrehadahadachechadadacecacagerachechadadachadadachaha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        25.9%; Score 435.6; DB 2; Length 461; 98.7%; Pred. No. 4.9e-93; tive 0; Mismatches 4; Indels 2;
                                                                                                         E. Sterne, Kessler, Goldstein & Fox, P.L.L.C. 1100 New York Ave., Suite 600
                                                                                                                                                                                                                                                                                                                           SOFTWARE PATENT POLICY 130
SOFTWARE PATENT APPLICATION DATA:
APPLICATION NUMBER: US/08/825,556A
FILING DATE: 19-WAR-1997
CLASSIFTCATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/013,653
FILING DATE: 19-WAR-1996
ATTORNEY/AGENT INFORMATION:
NAWE: Steffe Eric K.
REGISTRATION NUMBER: 36,688
REFRENCE/DOCKET NUMBER: 1488.0850001
TELECOMMUNICATION INPORMATION:
TELECOMMUNICATION INPORMATION:
TELECOMMUNICATION INPORMATION:
APPLICANT: Su, Jeffrey Y.
APPLICANT: Li, Haodong
TITLE OF INVENTION: Obemokine Alpha 2
NUMBER OF SEQUENCES: 10
                                                                                                                                                                                                                                                                                       COMPUTER: IBM PC Compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEFAX: 202-371-2540
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                           COUNTRY: USA
ZIF: 2005-2934
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              . 461 base pairs
nucleic acid
EDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches 450; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     mat_peptide
127..375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    sig peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  sig_peptide
                                                                                    CORRESPONDENCE ADDRESS:
ADDRESSEE: Sterne, K
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CDS
79..375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MOLECULE TYPE: CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      43..375
                                                                                                                                                       Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 both
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-08-825-556A-1
                                                                                                                             STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGIH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
```

```
11 GCGCAGAGCGCAGCGCACAGACAGACCCTGGGCATCCACCGACGGCGCAGCCGGA 70
                                                                                                                                          25.9%;
                                                                                                                                            Query Match
Best Local Similarity 98.77
Matches 450; Conservative
                   mat_peptide
127..375
                                                                     sig_peptide 79..126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; TYPE: DNA
; ORGANISM: mouse
US-09-188-930-38
                                                                 NAME/KEY:
;
LOCATION:
US-09-238-184-1
FEATURE:
NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 550
                                                     FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ਨੇ
                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                           원
                                                                                                                                                                                                                                                                                                                                                                  ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                       305
                                                                                            489
                                                                                                                             365
                                                                                                                                                                                                    366 craccaacaaraccercaaaaaccreacaaacceccaaaacrecaaaccacaerregacare 425
                       306 gerecadadeadeadeadeecricarcadeideideadeadeecricaadeadeadeadeade
                                                                                            430 GCTGCAGGACCAAGCGCTTCATCAAGTGCTACAACGCCTGGAACGAAAGCGCAGGGT
                                                                                                                                                                 490 CTACGAAGAATAGGGTGAAAAACCTCAGAAGGGAAAACTCCCAAACCAGGTTGGGAAGACTTG
                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
APPLICANT: Ni, Jian
APPLICANT: Su, Jeffrey Y.
APPLICANT: Eu, Jeffrey Y.
APPLICANT: Li, Haodong
TITLE OF INVENTION: Chemokine Alpha 2
NUMBER OF SEQUENCES: 10
CORRESPENDENCE ADDRESS:
ADDRESSE: Sterne, Kessler, Goldstein & Fox, P.L.L.C.
STREET: 1100 New York Ave., Suite 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPALIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/238,184
                                                                                                                                                                                                                                         550 TG--CAAAGGACTTTGCAGATTAAAAAAAAAAAAA 583
                                                                                                                                                                                                                                                                           426 regenangenértregantrananananana 461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUBBER: US/08/825,556
FILING DATE: 19-MAR-1997
APPLICATION NUBBER: US 60/013,653
FILING DATE: 19-MAR-1996
ATTORNEY/AGENT INFORMATION:
NAME: Steffe, Eric K.
RETERENCE/DOCKET NUMBER: 1488.0850001
TELECOMMUNICATION INFORMATION:
TELEPHONE 202-371-2600
TELEPHONE 202-371-2600
TELEPAX: 202-371-2600
INFORMATION POR SEQ ID NO: 1: SEQUENCE CARRACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                  Sequence 1, Application US/09238184
Patent No. 6479633
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      461 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sig_peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CLASSIFICATION:
IOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COUNTRY: USA
ZIP: 20005-2934
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CDS
79..375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: CDS
LOCATION: 43..375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MOLECULE TYPE: CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              both
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURE:
NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY:
LOCATION:
```

```
489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    306 GCTGCAGAGCACCAAGCGCTTCATCAAGTGGTACAACGCCTGGAACGAGAAGGGCAGGTT 365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTACGAAGAATAGGGTGAAAAACCTCAGAAGGGAAAACTCCAAAACCAGTTGGGAGACTTG 549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         130 creeggeegecgerecgaeggeeagecaecerececargecereceargeege
                                                                                                                                                                                                                                                                                                                                                                                          6 CTCCGGGCCGCCGCCCACGGCCAGCGCCTCCTCCTCTTCTTCTCCTCCCACGCCGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                66 cecrecedratedeareadecreciededecedecederecreciderecrecidente
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 250 CACCGCGCGTGTGGACGGGTCCAAATGCAAGTGCTCCCGGAAGGGACCCAAGATCCGCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  310 CAGCGACGTGAAGAAGCTGGAAATGAAGCCAAAGTACCCGCACTGCGAGGAGAAGATGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        430 GCTGCAGAGCACCAAGCGCTTCATCAAGTGGTACAACGCCTGGAACGAGAAGCGCAGGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       190 cccrccegrcaecargaegcrccreeccecceccrecrecrecrecrecrecrecres
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 126 caccacacararacacacacacacana de procesoras de caccaracana de cacacaca de cacacaca de cacacaca de cacacaca de cacacacaca de cacacacaca de cacacacaca de cacacacacaca de cacacacacaca de cacacacacaca de cacacacacaca de cacacacacaca de cacacacacaca de cacacacacacaca de cacacacacacaca de cacacacacacaca de cacacacacaca de cacacacaca de cacacacacaca de cacacacaca de cacacacacaca de cacacacaca de cacacaca de cacaca de cacacaca de cacacaca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            41;
       Length 461;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NESOUL 188-930-38
; Sequence 38, Application US/09188930A
; Sequence 38, Application US/09188930A
; Retent No. 6150502
; GENERAL INFORMATION:
; APPLICANT: Watson, James D.
; APPLICANT: Strachan, Lorna
; APPLICANT: Strachan, Matthew
; APPLICANT: Ornus, Matthew
; APPLICANT: Ornus, Matchew
; TITLE OF INVENTION: Compositions Isolated From Skin Cells
; TITLE OF INVENTION: and Methods For Their Use
; TITLE OF INVENTION: and Methods For Their Use
; TITLE OF INVENTION: And Methods For Their Use
; TITLE REFERENCE: 11000.1011c1
; CURRENT APPLICATION NUMBER: US/09/188,930A
; CURRENT PILING DATE: 1998-11-09
; NUMBER OF SEQ ID NOS: 348
; SOGTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ouery Match
25.3%; Score 426; DB 3; Length 766
Best Local Similarity 79.5%; Pred. No. 1.1e-90;
Matches 606; Conservative 0; Mismatches 115; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TG--CAAAGGACTTTGCAGATTAAAAAAAAAAAA 583
              DB 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          426 reserradesarcirrecasarranananananana 461
Score 435.6; DB 4
Pred. No. 4.9e-93;
0; Mismatches 4
```

```
GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
```

OM protein - protein search, using sw model

April 22, 2004, 12:31:18; Search time 22 Seconds (without alignments) 260.476 Million cell updates/sec Run on:

US-09-978-189-370

1 MSLLPRRAPPVSMRLLAAAL......TKRFIKWYNAWNEKRRVYEE 111 Perfect score: Sequence:

BLOSUM62 Gapop 10.0 , Gapext 0.5 Scoring table:

389414 segs, 51625971 residues Searched:

Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

/cgn2\_6/ptodata/2/jaa/5A\_COMB.pep:\*
/cgn2\_6/ptodata/2/jaa/5B\_COMB.pep:\*
/cgn2\_6/ptodata/2/jaa/6A\_COMB.pep:\*
/cgn2\_6/ptodata/2/jaa/6A\_COMB.pep:\*
/cgn2\_6/ptodata/2/jaa/PCTUS\_COMB.pep:\*
/cgn2\_6/ptodata/2/jaa/PCTUS\_COMB.pep:\* Issued Patents AA:\* Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

	Description	Sequence 2, Appli	equence 2.		Sequence 3, Appli	34	equence 68	34,	equence 34	34	36	41,	41,	34	72	34	34	70	34	Sequence 3, Appli	15	157	4	4	146	ς,	423, 3	equence 4,	
COLUMNIES	ΩI	US-08-825-556A-2	38-	-08-825-556A	-09-238-18	-188-93	-09-724-	US-09-312-283C-344	-09-188-93	-09-312-28	-09-312-2	-09-	-09-312-2	-09-188-93	-09-724-	-09-312-283C-	-09-186	-09-724-86	US-09-312-283C-345	-09-177-3	-09-188-	US-09-312-283C-157	-08-825-	US-09-238-184-4	US-08-679-493A-146	-476-3	-09-312-2	US-08-352-324A-4	
•	h DB	7	•	99 2	99 4	5 3	5 4	5 4	39	99 4	99 4	99 4	98	17 3	77 4	77 4	77 3		77 4	Ŋ	m	m	œ	œ	0	0	10 4	7 1	
	Query Match Length	7	ן	88.9	O.	7		7	. ~	2	~1	2	<b>о</b>	6	6	o.	. ~	co.	~		0.8	8.0	4.4	4.4	4	3.5	3.5 10	1.9	
æ	Score Ma	82	82	522 8	22	60	60	60	90	90	90	90		28		28				414 7	298 5	98	3.5	143.5 2	m	38	н	'n	
	Result No.	н	CV	m	41	ហ	9	7	ω	σ <b>ι</b>	10	11	12		14	15	16	17	18	19	50	21	22	23	24	25	26	27	

7 1 1 1	Appli	Appli	Appli	Appli	Appli	App1i	Appl:	Appli	App1i	Appli	Appli	Appli	Appli	Appli	ddy'	App	Appli	Appli
,	+	9	4	9	4	5٠	,	'n	7,	'n	,	ģ	7,	6	424	148,	'n	'n
	sednence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sednence	Sequence	Sequence	Sequence	Seguence
	US-08-862-60/-4	US-08-468-819-6	US-09-203-235-4	US-09-213-383-6	PCT-US95-16144-4	US-08-352-324A-7	US-08-862-607-7	US-08-468-819-5	US-09-203-235-7	US-09-213-383-5	PCT-US95-16144-7	US-08-812-003-9	US-08-649-006A-7	US-09-771-023-9	US-09-312-283C-424	US-08-679-493A-148	US-08-352-324A-5	US-08-862-607-5
¢	N	7	ო	4	Ŋ	н	7	7	٣	4	ហ	7	4	4,	4	4	Н	~
	, n T	107	107	101	107	107	101	107	107	107	107	71	96	96	96	106	106	106
	Z. J. S	21.9	21.9	21.9	21.9	20.0	20.0	20.0	20.0	20.0	20.0	19.3	18.9	18.9	18.9	18.6	18.2	18.2
	128.5	128.5	128.5	128.5	128.5	117.5	117.5	117.5	117.5	117.5	117.5	113	111	111	111	109	107	107
ć	87	53	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
						,												

## ALIGNMENTS

```
ADDRESSEE: Sterne, Kessler, Goldstein & Fox, P.L.L.C. STREET: 1100 New York Ave., Suite 600 CITY: Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARS: Patentin Release #1.0, Version #1.30
CURENT APPLICATION DATA:
APPLICATION NUMBER: US/08/825,556A
FILING DATE: 19-MAR-1997
                                                                                        APPLICANT: Ni, Jian
APPLICANT: Gentz, Reiner L.
APPLICANT: Gentz, Jeffrey Y.
APPLICANT: Li, Haodong
TITLE OF INVENTION: Chemokine Alpha 2
NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
ADDRESSEE: Sterne, Kessler, Goldstein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1488.0850001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CLASSITICATION: 435
CLASSITICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/013,653
FILING DATE: 19-MAR-1996
ATTOWNEY/AGENT INFORMATION:
NAME: Steffe, Eric K.
REGISTRATION NUMBER: 36,688
REFERNICE/DOCKET NUMBER: 1488.08500/
TELEPHONE: 202-371-2600
) TELEPHONE: 202-371-2640
) TELEPHONE: 202-371-2640
) INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
'TOWNTH: 111 amino acids
                    Sequence 2, Application US/08825556A Patent No. 5910431 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                  COUNTRY: USA
ZIP: Z0005-2934
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       : 111 amino acids
amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-825-556A-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-08-825-556A-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                   STATE:
```

0; Gaps 99.1%; Score 582; DB 2; Length 111; 99.1%; Pred. No. 1.4e-63; Live 0; Mismatches 1; Indels Matches 110; Conservative Best Local Similarity

; 0

```
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 MSLLPRRAPPVSMRLLAAALLLLLLLLALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKY 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 MSLLPRRAPPVSMRLLAAALLLLLLALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKY 60
1 MSLLPRRAPPVSMRLLAAALLILLLALYTARVDGSKCKCSRKGPKTRYSDVKKLRMKPKY 60
                                                   61 PHCEEKWVIITTKSVSRYRGQEHCLHPKLQSTKRFIKWYNAWNEKRRVYBE 111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61 PHCEEKMVIITTKSVSRYRGQEHCLHPKLQSTKRFIKWYNAWNEKRFYEE 111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              99.1%; Score 582; DB 4; Length 111; ilarity 99.1%; Pred. No. 1.4e-63; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                  E: Sterne, Kessler, Goldstein & Fox, P.L.L.C. 1100 New York Ave., Suite 600
                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 2, Application US/09238184
Patent No. 6479633
GENERAL INFORMATION:
APPLICANT: Gentz, Reiner L.
APPLICANT: Su, Jeffrey Y.
APPLICANT: Li, Hacdong
TITLE OF INVENTION: Chemokine Alpha 2
CORRESPONDENCE ADDRESS:
ADDRESSEDE: Sterne, Kessler, Goldstein 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1488.0850001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/825,556
FILING DATE: 19-MAR-1997
APPLICATION NUMBER: US 60/013,653
APPLICATION TOWNER: US 60/013,653
ATTOWNEY/AGENT INFORMATION:
NAME: Steffe, Eric K
REGISTRATION NUMBER: 36,688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REGISTRATION NUMBER: 36,688
REFERENCE/DOCKET NUMBER: 148
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-371-2600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    INFORMATION FOR SEQ ID NO: 2: SEQUENCE CHARACTERISTICS: LENGTH: 111 amino acids TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     202-371-2540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                  Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sest Local Sim
                                                                                                                                     RESULT 2
US-09-238-184-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-238-184-2
                                                                                                                                                                                                                                                                                                                                                                     STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ,
Va
                                                 ò
                                                                                    쉽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gg
```

```
1 MRILABAALLILILALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKYPHCEEKNVIITT 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   13 MRLLAAALLLLLLALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKYPHCEEKWVIITT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              / Match 88.9%; Score 522; DB 2; Length 99; Local Similarity 99.0%; Pred. No. 2.6e-56; nes 98; Conservative 0; Mismatches 1; Indels
APPLICANT: Gentz, Retner L.
APPLICANT: Gentz, Retner L.
APPLICANT: Li, Haodong
TITLE OF INVENTION: Chemokine Alpha 2
NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
ADDRESSE: Sterne, Kessler, Goldstein & Fox, P.L.L.C.
STREET: Li00 New York Ave., Suite 600
CITY: Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3: Sterne, Kesslar, Goldstein & Fox, P.L.L.C. 1100 New York Ave., Suite 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STALE.
COUNTRY: USA.
ZIP: 20005-2934

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: EL PR FC compatible
COMPUTER: PatentIn Release #1.0, Version #1.30
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
CURRENT APPLICATION NUMBER: US/08/825,556A
FTLING DATE: 19-MAR-1997
FTLING DATE: 19-MAR-1997
FTLING DATE: 19-MAR-1997
FTLING DATE: 10-MAR-1997
FTLING DATE: 10-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        73 KSVSRYRGQEHCLHPKLQSTKRFIKWYNAWNBKRRVYEE 111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61 KSVSRYRGQEHCLHPKLQSTKRFIKWYNAWNEKRRFYBE 99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CURCALL
APPLICATION 135
FILING DATE: 19-PM-L.
NAME: Steffe, Bric K.
REGISTRATION NUMBER: 36,688
REPERENCE/DOCKET NUMBER: 1488.085/
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION INFORMA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Ni, Jian
APPLICANT: Gentz, Reiner L.
APPLICANT: Gentz, Feffrey Y.
APPLICANT: Li, Hacdong
TITLE OF INVENTION: Chemokine Alpha 2
NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-238-184-3
; Sequence 3. Application US/09238184
; Patent No. 6479633
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 99 amino acids TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TOPOLOGY: linear
MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STREET: 1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20005-2934
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-08-825-556A-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Loca
Matches
```

Sequence 3, Application US/08825556A generat No. 5910431 GENERAL INFORMATION:

US-08-825-556A-3

RESULT 3

```
Mon Apr 26 15:46:54 2004
```

**18-02-2/8-187-3/0.rspt** 

April 22, 2004, 12:29:47; Search time 40 Seconds (without alignments) 875.563 Million cell updates/sec GenCore version 5.1.6 Copyright (c) 1993 - 2004 Compugen Ltd. - protein search, using sw model OM protein Run on:

US-09-978-189-370 1 SILPERRAPPVSMRLLAAAL.....TKRFIKWYNAWNEKRRVYEE 111 Title: Perfect score:

Sequence:

1017041 seqs, 315518202 residues Gapop 10.0 , Gapext 0.5 Scoring table: Searched: 1017041

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Total number of hits satisfying chosen parameters:

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

SPTREMBL Database :

SPTREMBL 25:\*

\*\* Sp\_axchea:\*

\*\* Sp\_fungi:\*

\*\* Sp\_fungi:\*

\*\* Sp\_invertebrate:\*

\*\* Sp

sp\_vertebrate:\*
sp\_unclassified:\*
sp\_rvirus:\*
sp\_bacteriap:\* sp\_archeap:\* rodent:\* sp\_plant:\* \_virus:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Description	Q9ns21 homo sapien	Q8k453 rattus norv	Q9jhh7 mus musculu	Q91v02 mus musculu	Q9dfg4 brachydanio	Q9dg18 gallus gall	Q9ep62 rattus norv	Q28724 oryctolagus	Q91zk9 sigmodon hi	Q91z64 sigmodon hi	Q8hxz4 macaca mula	Q8hxz3 macaca mula	Q7t0b3 ictalurus p	Q98tq2 oncorhynchu	Q7sx73 oncorhynchu	Q8min2 equus cabal
000000000000000000000000000000000000000	QI	Q9NS21	Q8K453	Q9JHH7	Q91V02	Q9DFG4	O9DGL8	Q9EP62	Q28724	Q91ZK9	Q91Z64	Q8HXZ4	Q8HXZ3	Q7T0B3	Q98TQ2	Q7SX73	Q8MIN2
	8	4	11	Ħ	금	13	13	ቪ	ø	Ξ	Η	9	ø	13	13	13	9
	% Query Match Length DB	111	66	66	95	100	98	101	108	100	101	107	107	95	97	97	113
	% Query Match	99.1	86.4	86.2	83.1	57.1	54.9	24.4	21.9	21.8	21:6	20.7	20.4	17.0	16.6	16.1	16.1
	Score	582	507	206	488	335	322.5	143.5	128.5	128	126.5	121.5	119.5	100	97.5	94.5	94.5
	Result No.	-	N	'n	4	Ŋ	9	7	ω.	σ\	. 10	11	12	13	14	15	. 16

Q99j60 mus musculu	Q8qfp5 cyprinus ca	4					Q90y59 paralichthy	Q99me0 rattus norv	Q8qgv8 paralichthy			Q91zb2 mus musculu	Q8c9b8 mus musculu	Q95mz7 ovis aries		œ.	Q8miz0 macaca mula	Q8uw91 triakis scy	macaca				н	Q8axz1 ictalurus p	Ψ		07tlp1 cyprinus ca	O18209 caenorhabdi
																												0
09560	Q8QFP5	Q8AXP4	08C9J0	Q7T0B4	Q9EQIS	Q7T0B2	Q90Y59	099ME0	080GV8	073912	Q9PTF8	Q91ZB2	Q8C9BB	Q95MZ7	Q867B3	068398	QBMIZO	Q8UW91	QBMIZ1	Q865F5	Q7YRB5	Q8QGB7	Q8K4B1	Q8AXZ1	062764	Q9ERB1	Q7T1P1	018209
11	13	13	11	13					m			11						13		9	Ġ	13	7	13	v	11	13	Ŋ
126	97	100	126	95	113	95	109	111	86	104	93	116	117	102	102	117	94	101	86	96	101	100	125	111	59	98	86	677
15.9	15.2	15.2	15.2	15.2	15.2	15.0	15.0	14.9	14.8	14.7	14.7	14.4	14.4	14.2		14.2		13.9	13.7				•		•		12.9	12.9
93,5	89.5	ď	σ,	89	8	88	88	87.5		86.5	86	84.5	84.5	ന	83.5	83.5	83	81.5	80.5	80.5	79.5	77.5	77.5	77	76.5		76	76
17	18	19	20	21	22	23	24	25		27	28	20	30	31	32	33	34	35	36	37	38	99	40	41	42	43	44	45

#### ALIGNMENTS

1 MSLLPRRAPPVSMRLLAAALLLLLLLALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKY 1 MSLLPRRAPPVSMRLLAAALLLLLALAYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKY PERFORMED TO STATE THE STATE TO STATE THE STATE TO STATE TO STATE THE STATE TO STATE THE STATE THE STATE TO STATE THE STATE STATE THE STATE STA Homo sapiens (Human). Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo. NCBI\_TaxID=9606; Query Match

99.1%; Score 582; DB 4; Length 111;
Best Local Similarity 99.1%; Pred. No. 1e-58;
Matches 110; Conservative 0; Mismatches 1; Indels Created) Last sequence update) Last annotation update) 111 AA. PRT; Q9NS21; 01-CCT-2000 (TrEMBLrel. 15, 01-CCT-2000 (TrEMBLrel. 15, 01-CCT-2003 (TrEMBLrel. 25, Chemokine MIP-2 gamma. PRELIMINARY; Q9NS21 RESULT 1 Q9NS21 SOUR REPORT OF THE PROPERTY OF ઠે

ö 9 09

```
94;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Q91V02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 4
091002
ID 09100
AC 09100
DT 01-DI
DT 01-DI
RRTTREET READ DOOR READ DO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 MRILABALLILILIALCASRVDGSKCKCSRKGPKIRYSDVKKLEMKPKYPHCEEKWVIITT 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (Brain cDNA, clone
chemokine CXC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    13 MRLLAAALLLLLLLLALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKYPHCEEKMVIITT
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Rattus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-0CT-2000 (TrEMBLrel. 15, Created)
01-0CT-2000 (TrEMBLrel. 15, Last sequence update)
01-0TT-2003 (TrEMBLrel. 24, Last annotation update)
01-0TM-2003 (TrEMBLrel. 24, Last annotation update)
B cell and mononcyte-activating chemokine precursor (Brain cDNA, clo MNCb-6413, similar to Mns musculus kidney-expressed chemokine CXC (Kec) mRNA) (Kec) (1200006123Rik protein) (Small inducible cytokine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sleeman M.A., Fraser J.K., Murison J.G., Kelly S.L., Prestidge R., Watson J.D., Kumble K.D.;
"B cell and monocyte-activating chemokine (BMAC), a novel non-ELR alpha chemokine:";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus
NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .
0
61 PHCEEKMVIITTKSVSRYRGQEHCLHPKLQSTKRFIKWYNAWNEKRRVYEE
                            61 PHCEEKWVIITTKSVSRYRGQEHCLHPKLQSTKRFIKWYNAWNEKRRFYEE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STRAIN=CS7BL;
Sasda N., Kusuda J., Tanuma R., Ito A., Hirata M., Sugano S.
Bashimoto K.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match

86.4%; Score 507; DB 11; Length 99;

Best Local Similarity 96.0%; Pred. No. 3.4e-50;

Matches 95; Conservative 2; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FIGURE 10. Koike H., Shimizu F., Kawachi H.;
Han G.D., Koike H., Shimizu F., Kawachi H.;
Fat homolog of breast and kidney.";
Submitted (FEB-2002) to the EMBL/GenBank/DDBJ databases.
EMBL; AF488348; AAM74057.1;
GO; GO:000576; C:extracellular; IEA.
GO; GO:0008009; F:chemokine activity; IEA.
GO; GO:0008555; P:immune response; IEA.
InterPro; IFR001811; Chemokine ILB.
Ffam; PF00048; ILB; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  99 AA; 11730 MW; 972C06336C7F46D6 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       73 KSVSRYRGQEHCLHPKLQSTKRFIKWYNAWNEKRVYEE 111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61 KSMSRYRGQEHCLHPKLQSTKRFIKWYNAWNEKRVYEE 99
                                                                                                                                                                                                                                                                                                                                Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            99 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          subfamily B).
CXCL14 OR SCYB14 OR BMAC OR 120006123RIK.
                                                                                                                                                                                                                                                                                                    Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRT;
                                                                                                                                                                                                                                                                                          01-OCT-2002 (TrEMBLrel. 22, 01-OCT-2002 (TrEMBLrel. 22, 01-JUN-2003 (TrEMBLrel. 24,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRELIMINARY;
                                                                                                                                                                                                                                 PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                   Rattus norvegicus (Rat)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mus musculus (Mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Submitted (APR-1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STRAIN-BALB/CBYJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NCBI_TaxID=10116;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE
                                                                                                                                                                                                                                                          Q8K453;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Q9JHH7
                                                                                                                                                                                                                                 Q8K453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 3
OQUIH17
DQUIH17
DD 01-0
DD 01
                                                                                                                                                       d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                        엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
```

```
SEQUENCE FROM N.A.

STRAIN=CSTBL/60; TISSUE=Embryo, and Lung;

STRAIN=CSTBL/60; PubMed=11217851;

Rawai U., Shinagawa A., Shibata K., Yoshino M., Itoh M., Ishii Y.,

Rawai U., Shinagawa A., Shibata K., Yoshino M., Itoh M., Ishii Y.,

Rawai U., Shinagawa A., Shibata K., Yoshino M., Adamaka I.,

Azawa K., Izawa M., Nishi K., Konno H., Adachi U., Fawuda S.,

Azawa K., Izawa M., Nishi K., Konno H., Kagukawa T., Saito R.,

Radota K., Matsuda H.A., Ashburner M., Baralov S., Casavant T.,

Radota K., Matsuda H.A., Ashburner M., Baralov S., Casavant T.,

Ruehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,

Ruehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,

Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G.,

Blake J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F.,

Brownstein M.J., Bult C., Fletcher C., Fullita M., Mariboldi M.,

Myons P., Marchionni L., Mashima J., Mazzarelli J., Mombaerts P.,

Nordone P., Ring B., Ringald M., Rodriguez I., Sakanoto N.,

Sasaki H., Sato K., Schoenbach C., Seya T., Shibata Y., Storch K.-F.,

Ruzuki H., Toyo-oka K., Wang K.H., Weitz C., Whittaker C., Wilming L.,

Nymachia-P., Wang K., Yoshida K., Hasegawa Y., Kawaji H., Kohtsuki S.,

Havashia-P., V.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       o
O
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           13 MRILLAAALLILLILALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKYPHCBEKMVIITT 72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
STRAIN=C57BL/6J; TISSUE=Body;
MEDLINE=22354683; PubMed=12466851;
The FANTOM CONSORTIUM,
the RIKEN Genome Exploration Research Group Phase I & II Team;
the RIKEN Genome Exploration Research Group Phase I & II Team;
MANALYSIS of The mouse transcriptome based on functional annotation of
60,770 full-length cDNAs.";
Nature 420:563-573 (2002).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 MRILAAALILILILALALCASRVDGSKCKCSRKGPKIRYSDVKKLEMKPKYPHCEEKMVVVTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
"isolation of full-length cDNA clones from mouse brain cDNA library made by oligo-capping method.", submitted (APR-2000) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             "Functional annotation of a full-length mouse cDNA collection."; Nature 409:685-690(2001).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      POTENTIAL.
B CELL AND MONONCYTE-ACTIVATING CHEMOKINE.
97352E91FF7F46D6 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            86.2%; Score 506; DB 11; Length 99; ilarity 94.9%; Pred. No. 4.4e-50;. Conservative 3; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       73 KSVSRYRGQEHCLHPKLQSTKRFIKWYNAWNEKRRVYEE 111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61 KSMSRYRGQEHCLHPKLQSTKRFIKWYNAWNEKRKVYEE 99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Created)
Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 95 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MGD; MGI:1888514; Cxc114.

GO; GO:0005576; C:extracellular; IEA.

GO; GO:0008009; F:chemokine activity; IE

GO; GO:0006555; P:immune response; IEA.

Interpro; IPR001811; Chemokine_IEA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EMBL; AF144754; AAF66694.1; -. EMBL; AB041614; BAA95097.1; -. EMBL; AK014351; BAB29292.1; -. EMBL; AK004615; BAB23411.1; -. EMBL; AK076112; BAC36192.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            99 AA; 11716 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     19,
24,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Q91V02;
01-DEC-2001 (TrEMBLrel.
01-DEC-2001 (TrEMBLrel.
01-JUN-2003 (TrEMBLrel.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pfam; PF00048; IL8; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Hayashizaki Y.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           24
```

249

65

309

ò

ò g à

```
369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   366 CTACGAAGAATAGGGTGAAAAACCTCAGAAGGAAAACTCCAAACCAGTTGGGAGACTTG 425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTACGAAGAATAGGGTGAAAAACCTCAGAAGGGAAAACTCCAAACCAGTTGGGAGACTTG 549
                                                                                                                                                                                                                                                                                                                                                                                                                                   66 CCCTCCGGTCAGCATGAGGCTCCTGGCGCGCGCTGCTCCTGCTGCTGCTGCTGCTGTGTA 125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 126 CACCGCGCGTGTGGACGGGTCCAAATGCAAGTGCTCCCGGAAGGGACCCAAGATCCGCTA 185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              11 GCGCAGAGCGCAGGCGCACAGACAGACAGCCTGGGCATCCACCGACGGCGCAGCGGA 70
                                                                                                                                                                                                                                                                                          130 CTCCGGGCCGCCGCTCCGACGGGCCAGCCCTCCCCATGTCCCTGCTCCCACGCCGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      306 GCTGCAGAGCAAGCGCTTCATCAAGTGGTACAACGCCTGGAACGAGAAGGCGCAGGTT
                                                                                                                                                                                                                                                                                                                                                                                        190 CCCTCCGGTCAGCATGAGGCTCCTGGCGGCCGCCGCTGCTGCTGCTGCTGCTGCTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               310 CAGCGACGTGAAGGTGGAAATGAAGCCAAAGTACCCGCACTGCGAGGAGAAGATGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCTGCAGAGCACCAAGCGCTTCATCAAGTGGTACAACGCCTGGAACGAAGCGCAGGGT
                                                                                                                                                                                                                                                                                                                                        6 crecesecescecreceareseceaesecerecerecearerecerecereceaesece
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 250 CACCGCGCGTGTGGACGGGTCCAAATGCAAGTGCTCCCGGAAGGGACCCAAGATCCGCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             186 cadcidadgraaagargcraaaargaadccaaagraccccccacraccagagaagargcr
                                                                                                                                                                                                                                               7
                                                                                                                                                                                              DB 4; Length 461;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Strachan, James D.
APPLICANT: Strachan, Lorna
APPLICANT: Strachan, Matthew
APPLICANT: Stleeman, Matthew
APPLICANT: Ornust, Rene
APPLICANT: Murison, James Greg
TITLE OF INVENTION: Compositions Isolated From Skin Cells
TILE OF INVENTION: and Methods For Their Use
FILE REFERENCE: 11000.1011c1
CURRENT APPLICATION NUMBER: US/09/188,930A
CURRENT FILING DATE: 1998-11.09
NUMBER OF SEQ ID NOS: 348
SOFTWARE: FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 25.3%; Score 426; DB 3; Length 766; Best Local Similarity 79.5%; Pred. No. 1.1e-90; Matches 606; Conservative 0; Mismatches 115; Indels '
                                                                                                                                                                                                                                            4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     550 TG--CAAAGGACTTTGCAGATTAAAAAAAAAAAA 583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  426 recenhacenértrechentrahanahanahan 461
                                                                                                                                                                                              Score 435.6; DB 4
Pred. No. 4.9e-93;
                                                                                                                                                                                                                                            0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 38, Application US/09188930A Patent No. 6150502 GENERAL INFORMATION:
                                                                                                                                                                                            25.9%;
                                                                                                                                                                                                                   Best_Local Similarity 98., Matches 450; Conservative
                                                                                              sig_peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; TYPE: DNA
; ORGANISM: mouse
US-09-188-930-38
US-09-188-930-38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQ ID NO 38
LENGTH: 766
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           430
                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                     d
                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                       489
                                                                                                                                                                                                                     CTACGAAGAATAGGGTGAAAACCTCAGAAGGGAAAACTCCAAACCAGTTGGGAGACTTG 549
                                                                                                                                                                                                                                                                366 CTACGAAGAATAGGGTGAAAACCTCAGAAGGGAAAACTCCAAACCAGTTGGGAGACTTG 425
                                                                    306 GCTGCAGAGCACCAAGCGCTTCATCAAGGGTACAACGCCTGGAACGAAAGCGCAGGTT 365
                           GCTGCAGAGCACCAAGCGCTTCATCAAGTGGTACAACGCCTGGAACGAAGCGCAGGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:

GENERAL INFORMATION:

APPLICANT: Ni, Jan

APPLICANT: Su, Jeffrey Y.

APPLICANT: Su, Jeffrey Y.

APPLICANT: Li, Handong

TITLE OF INVENTION: Chemckine Alpha 2

TORRESPONDENCE ADDRESS:

ADDRESSE: Sterne, Kessler, Goldstein & Fox, P.L.L.C.

STREET: 1100 New York Ave., Suite 600

CITY: Washington

STREET: LOOS-2934

COMPITER ERADABLE FORM:

MEDIUM TYPE: Floppy disk

COMPITER: IBM PC Compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICANTON NUMBER: US/09/238,184
                                                                                                                                                                                                                                                                                                                 TG--CAAAGGACTTTGCAGATTAAAAAAAAAAAA 583
                                                                                                                                                                                                                                                                                                                                                                 PILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/625,556
FILING DATE: 19-MAR-1997
APPLICATION NUMBER: US 60/013,653
FILING DATE: 19-MAR-1996
ATTORNEY/AGENT INFORMATION:
NAME: Steffe, Enic K.
REGISTRATION NUMBER: 1408.0850001
TELEPHONE: 202-371-2500
TELEPHONE: 202-371-2500
TELEFAX: 202-371-2500
                                                                                                                                                                                                                                                                                                                                                                                                                                                          5-09-238-184-1
Sequence 1, Application US/09238184
Patent No. 6479633
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 461 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       sig_peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TOPOLOGY: both
MOLECULE TYPE: CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  43..375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         79..375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME/KEY:
LOCATION:
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LOCATION:
                           370
                                                                                                                       430
                                                                                                                                                                                                                   490
                                                                                                                                                                                                                                                                                                                   550
                                                                                                                                                                                                                                                                                                                                                                 426
```

489 365

429

```
GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
```

April 22, 2004, 12:31:18 ; Search time 22 Seconds (without alignments) 260.476 Million cell updates/sec OM protein - protein search, using sw model Run on:

1 MSLLPRRAPPVSMRLLAAAL......TKRFIKWYNAWNEKRRVYEE 111 US-09-978-189-370 587 Title: Perfect score: Seguence:

389414 seqs, 51625971 residues BLOSUM62 Gapop 10.0 , Gapext 0.5 Searched:

Scoring table:

Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Issued Patents AA: Database

/cgn2\_6/ptodata/2/iaa/5A\_COMB.pep:\*
/cgn2\_6/ptodata/2/iaa/5B\_COMB.pep:\*
/cgn2\_6/ptodata/2/iaa/6A\_COMB.pep:\*
/cgn2\_6/ptodata/2/iaa/6B\_COMB.pep:\*
/cgn2\_6/ptodata/2/iaa/PcTUS\_COMB.pep:\*
/cgn2\_6/ptodata/2/iaa/PcTUS\_COMB.pep:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result		Query				-
No.	Score	Match	Length	BB	QI	Description
	582	99.1	111	7	US-08-825-556A-2	Sequence 2, Appli
10	582	a	111	4	-09-238-1	ď
lm	522	688	66	7	US-08-825-556A-3	'n
4	522	ထ		4	US-09-238-184-3	m
· cr	509		95	m	91-60	344,
ve	905	86.7	95	4	Ō	e 68,
7	209	86.7	95	4	ō	Sequence 344, App
00	206	86.2	9	ო	9-188	340
	206	86.2		4	39-31	340
10	506	86.2	66	4	US-09-312-283C-394	394
11	206	86.2	66	4	US-09-312-283C-417	417,
12	504.5	85.9	86	4	C	Sequence 418, App
13	428	72.9	77	ო	US-09-188-930-346	346,
14	428	72.9	77	4	US-09-724-864-72	72,
15	428	72.9	77	4	US-09-312-283C-346	34
16	424	72.2	77	ო	9-188-6	345,
17	424	72.2	77	4	US-09-724-864-70	70,
18	424	72.2	77	4	US-09-312-283C-345	Sequence 345, App
19	414	70.5	75	4	US-09-177-304-3	3, A <u>F</u>
20	298	50.8	13	m	-09-188-	12
21	298	50.8	13	4	US-09-312-283C-157	-
22	143.5	24.4	96	7	US-08-825-556A-4	4
23		24.4	96	4	-60-	4
24	143.5	24.4	100	4	-08-679-	H
25	138	23.5	100	M	4.	'n
26	138	23.5	100	4	-09-312-	Sequence 423, App
50	128.5	21.9	107	٦	US-08-352-324A-4	4

Appli	Appli	Appli	Appli	Appli	Appli	Appl:	Appli	Appli	Appli	Appli	Appli	Appli	P.	4, App		Appli	Appli	
4	ú	4,	ģ	4,	,	'n	'n	'n	'n	ŗ	o,	'n	6	424	148	'n	'n	
Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Seguence	Sequence	Seguence	Sequence	Seguence	Seguence	Sequence	Seguence	Sequence	Seguence	
US-08-862-607-4	US-08-468-819-6	US-09-203-235-4	US-09-213-383-6	PCT-US95-16144-4	US-08-352-324A-7	US-08-862-607-7	US-08-468-819-5	US-09-203-235-7	US-09-213-383-5	PCT-US95-16144-7	US-08-812-003-9	US-08-649-006A-7	US-09-771-023-9	US-09-312-283C-424	US-08-679-493A-148	US-08-352-324A-5	US-08-862-607-5	
ď	1 (1	יי	4	'n	-	N	N	ო	4,	ഗ	7	4	4	4	4	н	7	
107	107	107	107	107	107	107	107	107	107	107	71	96	96	90	106	106	106	
9 10	6.10		01.0	0.10	20.0	20.0	20.0	20.0	20.0	20.0	19.3	18.9	18.9	18.9	18.6	18.2	18.2	
108	128.5	. ac.	000	128.5	117.5	117.5	117.5	117.5	117.5	117.5	113	111	111	111	109	107	107	
c a	0 0	9 6	) i	1 0	1 m	) (J	LU LU	9	3.7	23	о М	4 0	4	4	. 4. I G	4.4	45	

### ALIGNMENTS

```
Generation US/08825556A;

Patent No. 5910431

GENERAL INFORMATION:
APPLICANT: Ni, Jule Reiner L.
APPLICANT: Li, Hacdong
TITLE OF INVENTION: Chemckine Alpha 2
NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
ADDRESSEE: Sterne, Kessler, Goldstein & Fox, P.L.L.C.
STREET: 1100 New York Ave., Suite 600
COTTY: Weshington
                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: Floppy disk
COMPUTER: Table PC compatible
OPERATING SYSTEM: PC compatible
OPERATING SYSTEM: PC DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/825,556A
FILING DATE: 19-MAR-1997
CLASSIFICATION: 435
PRICA APPLICATION DATA:
APPLICATION NUMBER: US 60/013,653
FILING DATE: 19-MAR-1996
ATTORNEY/AGENT INFORMATION:
NAME: Steffe, Eric K.
REGISTRATION NUMBER: 36,688
REFERENCE/DOCKET NUMBER: 1488.0850001
TELECOMMUTICATION INFORMATION:
TELECOMMUTICATION INFORMATION:
TELECOMMUTICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEFAX: 202-371-2540
INFORMATION FOR SEQ ID NO: 2:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           : 111 amino acids
amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE CHARACTERISTICS:
LENGTH: 111 amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MOLECULE TYPE: protein US-08-825-556A-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                        USA
                                                                                                                                                                                                                                                                                                     CITY: Was
STATE: DC
COUNTRY:
```

Query Match 99.1%; Score 582; DB 2; Length 111; Best Local Similarity 99.1%; Pred. No. 1.4e-63; Matches 110; Conservative 0; Mismatches 1; Indels

ô

à

1 MSLLPRRAPPVSMRLLAAALLLLLLLLLTYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKY 60

```
APPLICANT: Ni, Jian
APPLICANT: Gentz, Reiner L.
APPLICANT: Su, Jofffrey Y.
APPLICANT: Li, Haodong
TITLE OF INVENTION: Chemokine Alpha 2
NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
ADDRESSEE: Sterne, Kessler, Goldstein & Fox, P.L.L.C.
STREET: 1100 New York Ave., Suite 600
CITY: Washington
                                                                                                                                                                                                                                                              COUNTY: USA
COMPTER: USA
COMPUTER: EADBLE FORM:
MEDIUM TYPE: FIOPDY disk
COMPUTER: EAN FOCOMPATIBLE
COMPUTER: EAN FOCOMPATIBLE
COMPUTER: EAGENCE
COMPUTER: FIN FOCOMPATIBLE
COMPUTER: PATENTION DATA:
APPLICATION NUMBER: US/08/825,556A
FILING DATE: 19-MAR-1997
CLASSIFICATION DATA:
PRICATION NUMBER: US 60/013,653
FILING DATE: 19-MAR-1996
ATTORNEY/AGENT INFORMATION:
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            73 KSVSRYRGQEHCLHPKLQSTKRFIKWYNAWNEKRKVYEE 111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61 KSVSRYRGQEHCLHPKLQSTKRFIKWYNAWNEKRRFYEE 99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                88.9%; Score 522; DB 2;
99.0%; Pred. No. 2.6e-56;
trive 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME: Steffe, Eric K.
REGISTRATION NUMBER: 36,688
REGISTRATION NUMBER: 36,688
RETERRICCY/DOCKTEN NUMBER: 1488.0850001
TELEROMUNICATION INFORMATION:
TELEROMS: 202-371-2600
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 99 amino acids
TYPE: amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Ni, Jian
APPLICANT: Gentz, Reiner L.
APPLICANT: Gentz, Reffrey Y.
APPLICANT: Li, Haodong
TITLE OF INVENTION: Chemokine Alpha 2
NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 3, Application US/09238184
Patent No. 6479633
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 99.07
Matches 98; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TOPOLOGY: linear
MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-08-825-556A-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 4
US-09-238-184-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 MSLLPRRAPPVSMRLLAAALLLLLLLLALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKY 60
        1 MSILPRRAPPUSMRILARAALILILILALYTARUDGSKCKCSRKGPKIRYSDVKKLEMKPKY 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61 PHCEEKWYIITTKSYSRYRGQEHCLHPKLQSTKRFIKWYNAWNEKRRFYEE 111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61 PHCEENWIITTKSVSRYRGOEHCLHPKLOSTKRFIKWYNAWNEKRRVYEE 111
                                                                                  61 PHCEEKMVIITTKSVSRYRGQEHCLHPKLQSTKRFIKWYNAWNEKRRVYEE 111
                                                                                                                61 PHCEBROWJITTKSVSRYRGQEHCLAPKLOSTKRFIKWYNAWNEKRRFYEE 111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 99.1%; Score 582; DB 4; Length 111; Best Local Similarity 99.1%; Pred. No. 1.4e-63; Matches 110; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                      APPLICANT: Ni, Jian
APPLICANT: Gentz, Reiner L.
APPLICANT: Gentz, Reiner L.
APPLICANT: Su, Jeffrey Y.
APPLICANT: Li, Haodong
TITLE OF INVENTION: Chemokine Alpha 2
TITLE OF SEQUENCES: 10
CORRESPONDENCE ADDRESS: 10
CORRESPONDENCE ADDRESS: Sterne, Kessler, Goldstein & Fox, P.L.L.C.
STREET: 1100 New York Aye., Suite 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Rloppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOPTWARE: Patentin Release #1.0, Version #1.30
CURRANT APPLICATION DATA:
APPLICATION NUMBER: US/09/238,184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1488.0850001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/825,556
FILING DATE: 19-WAR-1997
APPLICATION NUMBER: US 60/013,653
FILING DATE: 19-WAR-1996
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                           US-09-238-184-2
; Sequence 2, Application US/09238184
; Patent No. 6479633
; GENERAL INFORMATION;
; APPLICANT: Ni, Jian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME: Steffe, Eric K.
REGISTRATION NUMBER: 36,688
REFERENCE/DOCKET NUMBER: 146
TELECHONE: 202-371-2600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEFAX: 202-371-2540 INFORMATION FOR SEQ ID NO: 2: SEQUENCE CHARACTERISTICS: LENGTH: 111 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 111 amino acids
TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20005-2934
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DC
USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-238-184-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .
&
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     qq
                                                                                  ò
                                                                                                                                <del>a</del>
```

Sequence 3, Application US/08825556A Patent No. 5910411 GENERAL INFORMATION:

RESULT 3 US-08-825-556A-3

```
13 MRLLAAALLLLLLALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKYPHCEERMVIITT 72
                                         0; Gaps
Length 99;
                                     1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADDRESSEE: Sterne, Kessler, Goldstein & Fox, P.L.L.C. STREET: 1100 New York Ave., Suite 600 CITY: Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COUNTRY: USA
ZIP: 20005-2934
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STATE:
```

```
GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
```

April 22, 2004, 12:29:47; Search time 40 Seconds (without alignments) 875.563 Million cell updates/sec OM protein - protein search, using sw model Run on:

1017041 segs, 315518202 residues Searched:

Total number of hits satisfying chosen parameters:

1017041

Minimum DB seq length: 0 Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

SPTREMBL 25:\*
1: Sp archea:\*
2: Sp\_bacteria:\*
3: Sp\_bacteria:\*
4: Sp\_human:\*
5: Sp\_invertebrate:\*
5: Sp\_mammal:\*
6p\_mammal:\*
6p\_mammal:\*
6p\_phage:\*
7: Sp\_nremeria:\*
7: Sp\_nremeria:\* sp\_plant:\*
sp\_rodent:\*
sp\_virus:\*
sp\_vertebrate:\*
sp\_unclassified:\*
sp\_rvirus:\*
sp\_rvirus:\*
sp\_rvirus:\* Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

sp\_archeap:\*

## SUMMARIES

DB ID 4 Q9NS21 11 Q8K453 11 Q9VHH7 13 Q91V02 13 Q9DFG4 13 Q9DFG4 11 Q91ZK9																	
Accre Mutch Length DB Match 111 4 582 99.1 111 4 506 86.2 99 111 4 686.2 99 111 4 686.2 99 111 4 686.2 99 111 122.5 54.9 100 111 128.5 21.6 100 11 128.5 21.6 100 11 119.5 20.4 107 6 119.5 20.4 107 107 6 119.5 20.4 107 6 119.5 20.4 107 107 6 119.5 20.4 107 107 6 119.5 20.4 107 107 107 107 107 107 107 107 107 107	Description	Q9ns21 homo sapien	Q8k453 rattus norv	Q9jhh7 mus musculu	Q91v02 mus musculu	Q9dfg4 brachydanio	Q9dg18 gallus gall	Q9ep62 rattus norv	028724 oryctolagus	Q91zk9 sigmodon hi	Q91z64 sigmodon hi	Q8hxz4 macaca mula	Q8hxz3 macaca mula	Q7t0b3 ictalurus p	Q98tg2 oncorhynchu	Q7sx73 oncorhynchu	O8min2 equus cabal
Accre Mutch Length DB Match 111 4 582 99.1 111 4 506 86.2 99 111 4 686.2 99 111 4 686.2 99 111 4 686.2 99 111 122.5 54.9 100 111 128.5 21.6 100 11 128.5 21.6 100 11 119.5 20.4 107 6 119.5 20.4 107 107 6 119.5 20.4 107 6 119.5 20.4 107 107 6 119.5 20.4 107 107 6 119.5 20.4 107 107 107 107 107 107 107 107 107 107	ID	Q9NS21	Q8K453	09 ЛНН 7	Q91V02	Q9DFG4	Q9DGL8	Q9EP62	028724	Q912K9	Q91Z64	Q8HXZ4	Q8HXZ3	Q7T0B3	Q98TQ2	Q7SX73	OBMINZ
SCCCATAGE STATE ST		4.	1	11	11	13	13	Ę	9	11	17	ø	ø	13			ø
SCCCATAGE STATE ST	Length	111	6 6	66	95	100	96	101	108	100	101	107	107	95	97	97	113
	% Query Match	99.1	86.4	86.2	83.1	57.1	54.9	24.4	21.9	21.8	21.6	20.7	20.4	17.0	16.6	16.1	16.1
Res Nut 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Score	582	507	506	488	335	322.5	143.5	128.5	128	126.5	121.5	119.5	100	97.5	94.5	94.5
	Result No.	-	7	es	4	'n	9	7	<b>cc</b>	6	10	11	12	13	14	15	16

	ctalur us mus ctalur aralic	para gall brac	ob mus my ovis a: capra ] human macaca ) macaca	4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	062764 equus cabal Q9exbl mesocricetu Q7tlpl cyprinus ca 018209 caenorhabdi
099J60 08QFP5 08AXP4 Q8C9J0	Q7T0B4 Q9EQI5 Q7T0B2 Q90Y59	Q957ED Q8QGV8 Q99TF8 Q91ZB2	Q8C9B8 Q95MZ7 Q867B3 Q68398 Q8MIZ0 Q8WIZ0	Q8MIZ1 Q865F5 Q7YRB5 Q8QGB7 Q8K4B1 Q8AXZ1	062764 Q9ERB1 Q7T1P1 018209
	2222	1333	H. O. O.	мнм	5 11 6
126 100 126	11 11 10 10 10 10 10 10 10 10 10 10 10 1	104 104 116	117 102 117 117 101	98 101 100 125	59 98 98 677
15.2 15.2 15.2	15.052	111111		13.77 13.25 13.25 13.25	
8888 8999 8999 8999		86.5 84.5 84.5	88 83.5 83.55 81.55 81.55 81.55	80.5 77.5 77.5	76.5 76 76 76
118 119 20	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	7 7 7 9 7 0 7 0 7 0 7 0 7 0 7 0 7 0 7 0	8 8 8 8 8 8 6 4 8 8 8 8 8 7 8 8 8 8 8 8	8888 888 888 888 888 888 888 888 888 8	2444 2644 3

## ALIGNMENTS

ö

```
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9
                                                                                                                                                                                08K453;
01-0CT-2002 (TrEMBLrel. 22, Created)
01-0CT-2002 (TrEMBLrel. 22, Last sequence update)
01-0TN-2003 (TrEMBLrel. 24, Last annotation update)
BRAK.
Rattus norvegicus (Rat).
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Butheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
NCBL TaxID=10116;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   13 MRLLAAALLLLLLALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKYPHCEERWVIITT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-0CT-2000 (TrEMBLrel. 15, Created)
01-0CT-2000 (TrEMBLrel. 15, Last sequence update)
01-0CT-2000 (TrEMBLrel. 24, Last amoncation update)
01-JUN-2003 (TrEMBLrel. 24, Last amoncation update)
01-JUN-2003 (TrEMBLrel. 24, Last amoncation update)
MNCD-6413; similar to Mus musculus kidney-expressed chemokine CXC
(Kec) mRNA (Kec) (1200006123Rik protein) (Small inducible cytokine subfamily B).
CXCL14 OR SCYB14 OR BMAC OR 1200006123RIK.
Mus musculus (Mouse).
Musmaryotta; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi; Mammalia; Butheria; Rodentia; Sciurognathi; Muridae; Musine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
STRAIN=BALB/CBYJ;
Sleman M.A., Fraser J.K., Murison J.G., Kelly S.L., Prestidge R.,
Watson J.D., Kumble K.D.;
"B cell and monocyte-activating chemokine (BMAC), a novel non-ELR
alpha chemokine.";
61 PHCKEMVIITTKSVSRYRGQEHCLHPKLQSTKRFIKWYNAWNEKRRVYEE 111
                        61 PHCEEKWVIITIKSVSRYRGQEHCLHPRLQSIKRFIKWYNAWNEKRRFYEE 111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STRAIN=CS7BL;
Osada N., Kusuda J., Tanuma R., Ito A., Hirata M., Sugano S.,
                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
SIQUENCE FROM N.A.
STRAIN=Wistar;
Ann G.D., Koike H., Shimizu F., Kawachi H.;
Har homolog of breast and kidney.";
Submitted (FEB-2002) to the EMBL/GenBank/DDBJ databases.
BEG, G0:0005576; C:extracellular; IEA.
GO; G0:0008576; C:extracellular; IEA.
GO; G0:0008575; P:immune response; IEA.
R GO; G0:000811; Chemokine_ILB.
R InterPro; IPR001811; Chemokine_ILB.
R Pfam, Pf00048; ILB; 1.
SEQUENCE 99 AA; 11730 MM; 972C06336C7F46D6 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            86.4%; Score 507; DB 11; Length 99; 96.0%; Pred. No. 3.4e-50; ive 2; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Submitted (APR-1999) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  73 KSVSRYRGQEHCLHPKLQSTKRFIKWYNAWNEKRRVYEE 111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KSWSRYRGQEHCLHPKLOSTKRFIKWYNAWNEKRRVYEE 99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      99 AA.
                                                                                                                                                                    99 AA
                                                                                                                                                                    PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 96.0
Matches 95; Conservative
                                                                                                                                                                 PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                               Q8X453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 09лнн7
                                                                                                               RESULT 2
Q8K453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 3
C9JHH7
AC C9JHH AC C9JHH AC C9JHH DI OI -O DI OI
ð.
                                       d
                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
```

```
REPUBLICE FROM N.A.

REPUBLICE FROM N.A.

REPUBLINE-22354683. PubMed=12466831;

REPUBLINE-22354683. PubMed=12466831;

RA THE FANTOM CONSORTIUM.

RA THE RIKEN Genome Exploration Research Group Phase I & II Team;

RA THAILYSIS of the mouse transcriptome based on functional annotation of GO, 770 full-length cDNRs.";

REPUBL, ARIATO44, AAP66694.1; ...

DR EMBL, AR01431; BAB29192.1; ...

DR EMBL, AK01431; BAB29192.1; ...

DR EMBL, AK01431; BAB29192.1; ...

DR EMBL, AC01431; BAB29192.1; ...

DR EMBL, AC01431; BAB29192.1; ...

DR GO, GO:0008009; F:chemokine activity; IEA.

DR GO, GO:0008009; F:chemokine activity; IEA.
                                                                                                                              SEQUENCE FROM N.A.

SEQUENCE FROM N.A.

RA Grakawa T., Shinbara K., Yoshino M., Itoh M., Ishii Y., Kawai J., Shinbada K., Yoshino M., Itoh M., Ishii Y., Kawai J., Shinbada K., Yoshino M., Itoh M., Ishii Y., Rawai T., Hara A., Pukunishi Y., Konno H., Adachi J., Fukuda S., Xamanaka I., Radota K., Izawa M., Nishi K., Kiyoswa H., Kondo S., Yamanaka I., Radota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T., Radota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T., Radota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T., Radota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T., Radota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T., Radota K., Nikalo I., Pesole G., Quackenbush J., Radota K., Okido T., Furuno M., Aon H., Baldarelli R., Barsh G., Bataka J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F., Blake J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F., Brownstein M.J., Bult C., Fletcher C., Fujita M., Gariboldi M., Rodriguez I., Sakamoto N., Asonse P., Marchionni L., Mashima J., Mazzarelli J., Mombaerte P., Nordone P., Ring B., Ringwald M., Rodriguez I., Sakamoto N., Sabaki H., Sato K., Schoenbach C., Seya T., Shibara Y., Storch K., Storch K., Wang K.H., Weitz C., Whittaker C., Wilming L., Manshaw-Boris A., Yoshida K., Hasegawa Y., Kawaji H., Kohtsuki S., R. Nature 409:685-690(2001).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      13 MRLLAAAALLLLLLALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKYPHCEBKAVIITT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 MRLLAAALLLLLLALCASRVDGSKCKCSRKGPKIRYSDVKKLEMKPKYPHCEEKAVIVTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
'isolation of full-length cDNA clones from mouse brain cDNA library
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               POTENTIAL.

B CELL AND MONONCYTE-ACTIVATING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            86.2%; Score 506; DB 11; Length 99; 94.9%; Pred. No. 4.4e-50; Live 3; Mismatches 2; Indels
                          made by oligo-capping method.";
Submitted (APR-2000) to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CHEMOKINE.
97352E91FF7F46D6 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    73 KSVSRYRGQEHCLHPKLQSTKRFIKWYNAWNEKRRVYEE 111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61 KSMSRYRGQEHCLHPKLQSTKRFIKWYNAWNEKRRVYEE 99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (TrEMBLrel. 19, Created)
(TrEMBLrel. 19, Last sequence update)
(TrEMBLrel. 24, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE 99 AA; 11716 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 94.9
Matches 94, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pfam; PF00048; IL8; 1.
Signal.
SIGNAL 1 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Q91V02
Q91V02;
01-DEC-2001 (
01-DEC-2001 (
01-JUN-2003 (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 4
Q91V02
ID Q91V
AC Q91V
DT 01-D
DT 01-D
```

```
AAZ34205 standard; cDNA; 1685 BP.
                                                                                                                                                                                                                                                 07-DEC-1999
                                                                                                                                                                                                                                   AAZ34205;
                                                                                                                                                                                                           AAZ34205
                                                                                                                                                                                                                                   Human PRO
Human PRO
Human PRO
Human PRO
Human Bol
Novel hum
Nucleotid
Human Sec
CDNA enco
CDNA enco
Human CDN
Novel hum
Novel hum
Novel hum
Human CDN
                                           April 26, 2004, 03:16:23 ; Search time 694 Seconds (without alignments) 10314.429 Million cell updates/sec
                                                                                                                                                                                                                                                                                                               Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                     Aaz34205 Human
                                                                                          1 geggagacaagegeagageg........aatgtaaaaaaaaaaaaa 1685
                                                                                                                                                                                                                                                                                                                                                                      Description
                                                                                                                                                                                                                                                                                                                                                                                                                          Aca63773 N
Abv72423 N
Abv72423 N
Abv82577 C
Ada2409 N
Ada2409 N
Ada1256 N
Ada1256 N
Ada1256 N
Ada1256 N
Ada1256 N
Ada1268 N
Ada1269 N
Ada1269 N
Ada689177 N
Ada68917 N
Ada6896 N
Ada6896 N
                                                                                                                                                                                                                                                                                                                                                                                                    Aac78551 |
Abs55212 |
                                                                                                                                                                                                                                                                                                                                                                                                                    Acd42738
GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
                                                                                                                                               Total number of hits satisfying chosen parameters:
                                                                                                                                 3373863 seqs, 2124099041 residues
                                                                                                                                                                                                                                                                                                                                                SUMMARIES
                                                                                                                                                                                      Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                              - nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                     AAC78551
ABS55212
ACD42738
ACA63773
ABV72423
                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACA66318
ADA24908
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADC44017
ADC61777
                                                                                                                                                                                                                                                                                                                                                                                                                                           ACA71937
ABX92577
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACD29919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADA12569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADB73875
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADC68965
                                                                                                         IDENTITY NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                           genesequi980s:*
genesequi090s:*
genesequi000s:*
genesequi001bs:*
genesequi002s:*
genesequi003s:*
genesequi003bs:*
                                                                                                                                                                                                                                                                                                  geneseqn2004s:*
                                                                                                                                                                                                                     N Geneseq 29Jan04:
                                                                                                                                                               Minimum DB seq length: 0 Maximum DB seq length: 2000000000
                                                                           US-09-978-189-369
1685
                                                                                                                                                                                                                                                                                                                                                               Query
Match Length DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1685
1685
1685
1685
1685
1685
1685
                                                                                                                                                                                                                                                                                                                                                                                      Title:
Perfect score:
Sequence:
                                                                                                                                                                                                                                                                                                                                                                                             Score
                                                                                                          Scoring table:
                              OM nucleic
                                                                                                                                 Searched:
                                                                                                                                                                                                                      Database
                                                                                                                                                                                                                                                                                                                                                                                               Run on:
                                                                                                                                                                                                                                                                                                                                                               Result
No.
```

(first entry)

	ALIGNMENTS						
Aaz61823 Full-leng	AAZ61823	m	· ω	43.2	727.2	4.	
z52934 Human		7	1962	ä	872.6	C 44	
34 Human	AAZ52934	7	ø	•	974.6	43	
Human	AAZ42039	7	1630	64.8	1092.2	42	
Human	ABN88003	9	φ		1178.8	41	
-	ABX10892	7	5	80.	1358.4	4	
	AAZ08965	7	1458		1358.4	9 6	
Abx10886 cDNA enco	ABX10886	7	1564		44	30	
	AAZ08962	7	1564		14	37	
	AAF93905	Ŋ	1677	97.4	0	36	
ત્ત•	ADE89804	ដ	1685	100.0	89	35	
Ade48703 Human cDN	ADE48703	10	1685	100.0	68	34	
Adel7195 Human cDN	ADE17195	σ	1685	100.0	1685	33	
Human	ADD72544	σι	1685	100.0	1685	32	
Human	ADD73186	σ	1685	100.0	68	37	
Human	ADE16571	σ	1685	100.0	68	30	
7 Human	ADE35457	σ	1685	100.0	68	29	
03 Human	ADE49403	σ	1685	100.0	89	28	
Human	ADC42034	Φ	1685	100.0	1685	27	
Human	ADC62401	σ	68	100.0	68	26	
Human	ADC67465	σ	1685	100.0	89	25	
Adc41410 Human cDN	ADC41410	6	1685	100.0	1685	24	

```
Human; PRO; EST; expressed sequence tag; PCR primer; hybridisation; probe; blood coagulation disorder; cancer; cellular adhesion disorder; secreted protein; transmembrane protein; ss.
Human PRO273 nucleotide sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                             98US - 00040220

98US - 0078886 P.

98US - 0078936 P.

98US - 0079294 P.

98US - 0079294 P.

98US - 0079663 P.

98US - 0079663 P.

98US - 007966 P.

98US - 00796 P.

98US - 0079728 P.

98US - 0079920 P.
                                                                                                                                                                                                                                                                                                                                                                             98US-0077649P.
98US-0077791P.
98US-0078004P.
                                                                                                                                                                                                                                                                   99WO-US005028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20-MAR-1998;
20-MAR-1998;
20-MAR-1998;
25-MAR-1998;
                                                                                                                                      Homo sapiens
                                                                                                                                                                              WO9946281-A2
                                                                                                                                                                                                                                                                     08-MAR-1999;
                                                                                                                                                                                                                        16-SEP-1999
```

```
98US-00803338
98US-00803338
98US-00803338
98US-0081049P
98US-0081299
98US-0081299
98US-0081299
98US-0081299
98US-0081299
98US-0081299
98US-0081299
98US-0082159
98US-0082159
98US-0082169P
98US-0082169P
98US-0083136P
98US-0083195
98US-0083195
98US-0083195
98US-0083195
98US-0083195
98US-0083195
98US-0083195
98US-008319
                                                                                                                                                                                                                                                                                                                        98US-0084607P

98US-0084637P

98US-0084637P

98US-0084640P

98US-0084640P

98US-0084640P

98US-0084643P

98US-0085689

98US-0085573P

98US-0085573P

98US-0085573P

98US-0085579P

98US-0085579P

98US-0085579P

98US-0085579P

98US-0085579P

98US-0085579P

98US-0085579P

98US-0085579P

98US-0085579P

98US-0085579P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 98US-0086430P.
98US-0086486P.
98US-0087098P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           98US-0087106P.
98US-0087208P.
98US-0094651P.
98US-0100038P.
                                                                                                                                                                                                                                                                    29-APR-1998;
30-APR-1998;
05-MAY-1998;
06-MAY-1998;
06-MAY-1998;
07-MAY-1998;
                                                                                                                                                                                                                                                                                                                                                                          13-WAY-1998;
13-WAY-1998;
13-WAY-1998;
15-WAY-1998;
15-WAY-1998;
15-WAY-1998;
15-WAY-1998;
15-WAY-1998;
15-WAY-1998;
15-WAY-1998;
15-WAY-1998;
22-WAY-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 22-MAY-1998;
22-MAY-1998;
28-MAY-1998;
```

(GETH ) GENENTECH INC

Baker KP, Gurney A, Yuan J, Wood WI, Goddard A, WPI; 1999-551358/46. P-PSDB; AAY41739.

Chen J;

New secreted and transmembrane polypeptides and their polynucleotides,

```
The present invention describes secreted and transmembrane polypeptides and their polynucleotides. The nucleotide sequences are useful as sources of probes, primers, for chromosome mapping, and for generation of antisense sequences. They can be used to create transgenic animals. The proteins can be used to treat a variety of diseases and disorders, depending on their function. Diseases that may be treated include blood coagulation disorders, cancers and cellular adhesion disorders. They may also be used to raise antibodies. AAZ33891 to AAZ34338, and AAY41665 to AAY41774 represent polynucleotide and polypeptide sequence given in the exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          301 GATCCGCTACAGCGACGTGAAGAAGCTGGAAATGAAGCCAAAGTACCCGCACTGCGAGGA 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             999
                                                                                                                                                                                                                                                                                                                                                                                                                                       9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCACCCCAAGCTGCAGAGCACCAAGCGCTTCATCAAGTGGTACAACGCCTGGAAACGAGAA 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  481 GCGCAGGGTCTACGAAGAATAGGGTGAAAAACCTCAGAAGGGAAAACTCCAAACCAGTTG 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGGGAGACCCATCTCTTGTGCTCCAGACTTCACAGGCTGCTTTTTATCAAAAGG 780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9
                                                                                                                                                                                                                                                                                                                                                                                                                                     181 ACGCCCCCCCCCCCCCGGTCAGCATGAGGCTCCTGGCGGCCGCGCTCCTCCTGCTGCTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        241 GGCGCTGTACACCGCGCGTGTGGACGGGTCCAAATGCAAGTGCTCCCGGAAGGGACCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241 GGGGTGTACACCGCGCGTGTGGACGGGTCCAAATGCAAGTGCTCCCGGAAGGGACCCAA
useful for treating blood coagulation disorders, cancers and cellular
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 dodgadadaadadcecadaececadedececadacadececeresecareceacedaece
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61 CGCAGCCGGAGCCAGCAGAGCCGGAAAGGCGCCCCCGGGCAGAGAAAGCCGAGCAGAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cechecceaneccaecheaneccecaececececceecananagecenene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121 GGGTGGCGTCTCCGGGCCGCCGCTCCGACGGGCCCAGCGCCCTCCCCATGTCCCTGCTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121 GGGTGGCGTCTCCGGGCCGCTCCGACGGCCCAGCGCCCTCCCCATGTCCCTGCTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GATCCGCTACAGCGACGTGAAGAAGCTGGAAATGAAGCCAAAGTACCCGCACTGCGAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGGGAGACCCATCTCTTGTGCTCCAGACTTCATCACAGGCTGCTTTTTATCAAAAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             361 GAAGATGGTTATCATCACCACCAAGAGCGTGTCCAGGTACCGAGGTCAGGAGCACTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCGCAGGGTCTACGAAGAATAGGGTGAAAACCTCAGAAGGGAAAACTCCAAAACCAGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   361 GAAGATGGTTATCATCACCACCAGGGGGTGTCCAGGTACCGAGGTCAGGAGCACTGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       421 GCACCCCAAGCTGCAGAGCACCAAGCGCTTCATCAAGTGGTACAACGCCTGGAACGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      601 AAAAAAAAAAAAAGCCTTTCTTTCTCACAGGCATAAGACACAAATTATATATTGTTATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           601 AAAAAAAAAAAGCCTTTCTTCTCACAGGCATAAGACACAAATTATATATTATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  661 AGCACTITITACCAACGGTCAGTTTTTACATTTTATAGCTGCGTGCGAAAGGCTTCCAGA
                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                ;
0
                                                                                                                                                                                                                                                                                                                                                     Query Match
100.0%; Score 1685; DB 2; Length 1685;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 1685; Conservative 0; Mismatches 0; Indels 0;
                                                                                                                                                                                                                                                                                                               Sequence 1685 BP; 484 A; 435 C; 387 G; 379 T; 0 U; 0 Other;
                                                       Claim 2; Fig 148; 530pp; English.
                 adhesion disorders
                                                                                                                                                                                                                                                                                                                                                                                                                                     Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          561
##X#X0000000000X&
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 οg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         \overset{\circ}{\delta}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               \overset{\circ}{\delta}
```

```
961 AGCTGCCACGGGCTCTCTTGTGGCCGGTCACAGCCTCAGTGTGACTCCACAGTG 1020
                                                                                                                                                                                                                                                                          1021 GCCCTGTAGCCGGGCAAGCAGGAGCAGGACTCTCTGTGTTCTCTGAGGAACTCAA 1080
                                                                                                                                                                                                                                                                                                                                                                                                               1141 AACATITCCAAGATCCTGTGATGGCGAGACAAATGATCCTTAAAGAAGGTGTGGGGTCTT 1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1561 CGCATTGTACTGCTGTGTTATATGCTATGTACATGTCAGAAAACCATTAGCATGCA 1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGCTGCCACGGGCTCTCCTGGGCTTATGGCCGGTCACAGCCTCAGTGTGACTCCACAGTG 1020
                                                                                                                                                                                                                                                          1021 GCCCCTGTAGCCGGCCAAGCAGGAGCAGGTCTCTCTGCATCTGTTCTGAGGAACTCAA 1080
                                                                                                                                                                                                                                                                                                                        1081 GITIGGTIGCCAGAAAATGTGCTICATTCCCCCCTGGTTAATTTTTACACACCCTAGGA 1140
                                                                                                                                                                                                                                                                                                                                                        1081 GÍTIGGITGCCAGAAAATGTGCTTCATTCCCCCCTGGTTAATTTTTACACACCCTAGGA 1140
                                                                                                                                                                                                                                                                                                                                                                                           AACATTTCCAAGATCCTGTGATGGCGAGACAAATGATCCTTAAAGAAGGTGTGGGGGTCTT 1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCCCAACCTGAGGATTTCTGAAAGGTTCACAGGTTCAAATATTTAATGCTTCAGAAGCATG 1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1201 TCCCAACCTGAGGATTTCTGAAAGGTTCACAGGTTCAATATTTAATGCTTCAGAAGCATG 1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGAGGTTCCCAACACTGTCAGCAAAACCTTAGGAGAAAACTTAAAAATATATGAATACA 1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1261 TGAGGTTCCCAACACTGTCAGCAAAACCTTAGGAGAAAACTTAAAAATATATGAATACA 1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TICITICCCTCACCACACACAGAACATGCAGTACTAAAGCAATATATTTGTGATTCCCCAT 1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1381 TICTITICCICACCACAACAGAACAIGCAGIACIAAAGCAAIAITITIGIGATICCCCAI 1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1441 GIAATTCTTCAATGTTAAACAGTGCAGTCCTCTTTCGAAAGCTAAGATGACCATGCGCCC 1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1441 GTAATTCTTCAATGTTAAACAGTGCAGTCCTCTTTCGAAAGCTAAGATGACCATGCGCCC 1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITCCTCTGTACATATACCCTTAAGAACGCCCCGTCCACACACTGCCCCCCAGTATATGC 1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGAAAACTCATGCCTTTCCTTTTTAAAAATGCTTTTTTGTATTTGTCCATACGTCACTA 840
                 781 GGAAACTCATGCCTTTCCTTTTTAAAAATGCTTTTTTGTATTTGTCCATACGTCACTA 840
                                                             TACATCTGAGCTTTATAAGCGCCCGGGAGGAACAATGAGCTTGGTGGACACATTTCATTG 900
                                                                                             841 TACATCTGAGCTTTATAAAGCGCCCGGGAGGAACAATGAGCTTGGTGGACACATTTCATTG 900
                                                                                                                             CAGTGTTGCTCCATTCCTAGCTTGGGAAGCTTCCGCTTAGAGGTCCTGGCGCCTCGGCAC 960
                                                                                                                                               TGCGCAATACACAGCTACAGACACACTTCTGTTGACAAGGGAAAACCTTCAAAAGCATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1681 AAAAA 1685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAAAA 1685
                                                                                                                                                                                             961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1261
781
                                                             841
                                                                                                                           901
                                                                                                                                                           901
                                                                                                                                                                                                                                                                                                                                                                                           1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                           1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1681
                                                                                                                                                                                                                                                  8 8 8
                      DP
                                                     ò
                                                                                   d
                                                                                                                                                台
                                                                                                                                                                                                                                                                                                                                                 8 6 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               合
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S 8
                                                                                                                  à
                                                                                                                                                                                           8
                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                  8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ⋧
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     a
```

Human, immune related disease, diagnosis, antiinflammatory, cardiant, W dematological, antiathritic; antitheumatic; immunosuppressive; haemostatic; antithyroid, antidiabetic; nootropic; neuroprotective; antianaemic; hepatotropic, virucide, antipsoriatic; antiallargic; antiasthmatic; systemic lupus erythematosus; rheumatoid arthritis; steoarthritis; spondyloarthropathy; systemic sclerosis; sarcoidosis; didopathic inflammatory myopathy; systemic sclerosis; sarcoidosis; w systemic vasculitis; autoimmune haemolytic anaemia; diabetes mellitus; autoimmune thrombocytopaenia; immune-mediated renal disease; disease; demyelinating disease; hepatobilary disease; Whipple's disease; hifiammatory bowel disease; gluten-sensitive enteropathy; autoimmune disease; immune-mediated skin disease; allergic disease; minunological disease; transplantation associated disease; we graft rejection; graft-versus-host-disease; ss. Human PRO273 protein UNQ240 encoding cDNA SEQ ID NO:45. 99WO-US005028. 99US-0123618P. 99US-0123957P. 99US-0125775P. 99WO-US012257 99WS-0141037P. 99US-0144758P. 99US-0145698P. 99US-0146222P. 99WO-US020594 99WO-US020140 99WO-US0211647 99WO-US023089 99WS-U16250EP 99WS-U16250EP 99WO-US028214 99WO-US028313 99WO-US028331 99WO-US008615. 99US-0131445P. 99US-0132371P. 99US-0134287P. 99WO-US028551. 02-MAR-2000; 2000WO-US005841 WO200053758-A2. Homo sapiens. 01-DEC-1999) 01-DEC-1999) 02-DEC-1999) 02-DEC-1999) 16-DEC-1999) 16-DEC-1999) 30-DEC-1999) 14-SEP-2000. 

(GETH ) GENENTECH INC

AAC58588 standard; cDNA; 1685

(first entry)

29-JAN-2001

AAC58588;

AACS8588 ID AACE XX AC AACE XX DT 29-J

RESULT

22-FEB-2000; 2000WO-US004414

L8-FEB-2000;

2000WO-US000219. 2000WO-US000376. 2000WO-US003565. 2000WO-US004341.

05-JAN-2000; 2 06-JAN-2000; 2 06-JAN-2000; 2 11-FEB-2000; 2 18-FEB-2000; 2

99WO-US030095. 99WO-US030999. 99WO-US031274.

3 Henzel Gurney AL, Hebert C, He D, Shelton DL, Smith V; Wood WI, Yan M; Ashkenazi AJ, Baker KP, Goddard A, Kabakoff RC, Lu Y, Pan J, Pennica Stewart TA, Tumas D, Watanabe CK,

WPI; 2000-572271/53

Sixty four PRO polypeptides, useful in the diagnosis and treatment of immune related disorders, e.g. systemic lupus erythematosis, rheumatoid arthritis, osteoarthritis, thyroiditis and diabetes mellitus.

Claim 23; Fig 19; 309pp; English.

The present invention describes sixty four human PRO proteins which can be used in the treatment of immune related diseases. The human PRO proteins, anti-PRO antibodies, agonists and antagonists are useful for treating and diagnosing immune related disorders. The disorders are selected from systemic lupus erythematosus, rheumatorid arthritis, selected from systemic lupus erythematosus, rheumatorid arthritis, osteoarthritis, juvenile chronic arthritis, spondyloarthropathies, Sjogren's systemic vasculitis, artodiosis, autoammune haemolytic systemic especial chromic arthritis, autoammune haemolytic inmune-mediated renal disease, demyelinating diseases of the central and peripheral navious systems, hepatobiliary diseases, inflammatory bowel disease, altonimune mediated skin diseases, allergic disease, immunological diseases of the lung, and transplantation associated diseases including graft rejection and graft-versus host-disease. AACS837 to AACS838 commences provided and professor human PRO sequences. AACS8579 to AACS8642 and AAB33414 to AAB33477 represent human PRO polynucleotide and protein sequences given in the exemplification of the present invention.

Sequence 1685 BP; 484 A; 435 C; 387 G; 379 T; 0 U; 0 Other;

ò a õ

120 120 180 180 240 240 300 300 360 360 420 480 480 540 540 600 420 9 60 1 GCGGAGACAAGCGCAGAGCGCACGCACGCCACAGACAGCCCTGGGCATCCACCGACGG degradocarcricodescodescoderrecanadoseconadosecereceradosecrece 301 GATCCGCTACAGCGACGTGAAGAAGCTGGAAATGAAGCCAAAGTACCCGCACTGCGAGGA CGCAGCCGGAGCCAGAGCCGGAAGGCGCCCCCGGGCAGAAAGCCGAGAGCAA GGGTGGCGTCTCCGGGCCGCTCCGACGGGCCAGCGCCCTCCCCATGTCCCTGCTCCC 241 GGCGCTGTACACCGCGCGTGTGGACGGGTCCAAATGCAAGTGCTCCCGGAAGGGACCCAA 241 decectoraccececeroracaccecerorana a dececececana de dececececana de decece de dececececena de decece de de decece de decece de decece de decece de decece de decece de de decece de decece de de decece de decece de decece de decece de de decece de de de decece de 361 GAAGAIGGTIAICATCATCACCACGAGAGCGIGICCAGGTACCGAGGTACGAGGTCAGGAGCACIGCCT 421 GCACCCCAAGCTGCAGAGCACCAAGCGCTTCATCAAGTGGTACAAGGCCTGGAACGAGAA 481 GCGCAGGGTCTACGAAGAATAGGGTGAAAAACCTCAGAAGGGAAAACTCCAAACCAGTTG GCGCAGGGTCTACGAAGAATAGGGTGAAAACCTCAGAAGGGAAAACTCCAAACCAGTTG 1 GCGGAGACAAGCGCAGAGCGCAGCGCACGCCCACAGACAGCCCTGGGCATCCACCGACGG CGCAGCCGGAGCCAGCAGAGGCCGGAAAGCCCCGGGGCAGAAGCCGAGAAGCCA GATCCGCTACAGCGACGTGAAGAAGCTGGAAATGAAGCCAAAGTACCCGCACTGCGAGGA GAAGATGGTTATCATCACCACCAAGAGCGTGTCCAGGTACCGAGGTCAGGAGCACTGCCT GCACCCCAAGCTGCAGAGCACCAAGCGCTTCATCAAGTGGTACAACGCCTGGAACGAGAA Gaps ô Query Match 100.0%; Score 1685; DB 3; Length 1685; Best Local Similarity 100.0%; Pred. No. 0; Marches 1685; Conservative 0; Mismatches 0; Indels 0; 61 301 361 421 121 121 g õ d ∂ g à qq ò g à 셤 ద

ò

1020 1080 1140 1200 1260 1260 1380 1380 1440 1500 1620 1020 1680 900 960 960 9 720 780 780 900 661 AGCACTITITACCAACGGTCAGTITITACAITITATAGCTGCGTGCGAAAGGCTTCCAGA 721 TGGGAGACCCATCTCTTGTGCTCCAGACTTCATCACAGGCTGCTTTTTATCAAAAGG 781 GGAAAACTCATGCCTTTCCTTTTTAAAAAATGCTTTTTTGTATTTGTCCATACGTCACTA 841 PACATCTGAGCTTTATAAGCGCCCGGGAACAACAATGAGCTTGGTGGACACATTTCATTG 961 AGCTGCCACGGGCTCTCCTGGGCTTATGGCCGGTCACACGCCTCAGTGTGACTCCACAGTG 1021 GCCCCTGTAGCCGGGCAAGCAGGAGCAGGTCTCTCTGCATCTGTGTTCTTGAGGAACTCAA GTTTGGTTGCCAGAAAAATGTGCTTCATTCCCCCCTGGTTAATTTTTTACACACCCTAGGA 1201 TCCCAACCTGAGGATTTCTGAAAGGTTCACAGGTTCAATATTTAATGCTTCAGAAGCATG 781 GGAAAACTCAIGCCTTICCTTITIAAAAAIGCTTITITGTATTIGICCAIACGICACTA 901 CAGTGTTGCTCCATTCCTAGCTTGGGAAGCTTCCGCTTAGAGGTCCTGGGGGCCTCGGCAC AGCTGCCACGGGCTCTCCTGGGCTTATGGCCGGTCACAGCCTCAGTGTGACTCCACAGTG GCCCCTGTAGCCGGGCAAGCAGGACAAGTCTCTCTGCAGTTCTGTTCTCTGAGGAACTCAA GTTTGGTTGCCAGAAAATGTGCTTCATTCCCCCCTGGTTAATTTTTACACACCCTAGGA 1141 AACATTTCCAAGATCCTGTGATGGCGAGACAAATGAFCCTTAAAGAAGGTGTGGGGGTCTT TCCCAACCTGAGGATTTCTGAAAGGTTCACAGGTTCAATATTTAATGCTTCAGAAGCATG TGAGGTTCCCAACACTGTCAGCAAAACCTTAGGAGAAAACTTTAAAAATATATGAATACA 1261 TGAGGTTCCCAACACTGTCAGCAAAAACCTTAGGAGAAAACTTAAAAATATATGAATACA GTAATTCTTCAATGTTAAACAGTGCAGTCCTCTTTCGAAAGCTAAGATGACCATGCGCCC CGCATTGTACTGCTGTGTTATATGCTATGTACATGTCAGAAACCATTAGCATTGCATGCCA 501 AAAAAAAAAAAAGCCTTTCTTTCTCACAGGCATAAGACACAAATTATATTTTTTTATGA TGGGAGACCCATCTCTTGTGCTCCAGACTTCATCACAGGCTGCTTTTTATCAAAAGG 901 cadrictriccarrictradiridgaAacrirccacriradaGrictridgiacriccridgiacric **AACATTTCCAAGATCCTGTGATGGCGAGACAAATGATCCTTAAAGAAGGTGTGGGGGTCTT** TGCGCAATACACAGCTACAGACACACTTCTGTTGACAAGGGAAAACCTTCAAAGCATGT TTCTTTCCCTCACCACAACATGCAGTACTAAAGCAATATATTGTGATTCCCCAT 1381 Trontrocorcacacacacacacacacacacacacacacana protectar GTAATTCTTCAATGTTAAACAGTGCAGTCCTCTTTCGAAAGCTAAGATGACCATGCGCCC 1321 841 1081 1261 1321 1441 1501 961 1021 1081 1141 1201 1381 1441 1561 1621 셤 ∂ g 8 Db ò Ωp ò q ò P ઠે g ò g  $\delta$ 엄 à  $\dot{\delta}$ g à g 8 8 8 g ò ద ò ద ò g

1681 AAAAA 1685 1681 AAAAA

AAC78551 standard; cDNA; 1685

RESULT 3

AAC78551;

entry) 08-FEB-2001 Human PRO273 (UNQ240) nucleotide sequence SEQ ID NO:369

Human; secreted protein; transmembrane protein; PRO; EST; cytostatic; expressed sequence tag; detection; cancer; ss.

WO200053756-A2

2000WO-US004341

08-MAR-1999; 99WO-US005028.
12-MAR-1999; 99US-0123957P.
21-APR-1999; 99US-0126773P.
28-APR-1999; 99US-01302228.
28-APR-1999; 99US-013428P.
23-JUN 1999; 99US-0141037P.
26-JUL-1999; 99US-0141037P.
26-JUL-1999; 99US-014568P.
20-DCT-1999; 99WO-US028551.
02-DEC-1999; 99WO-US028551.
02-DEC-1999; 99WO-US028551.
04-DEC-1999; 99WO-US031243.
30-DEC-1999; 99WO-US031243.
30-DEC-1999; 99WO-US031243.
30-DEC-1999; 99WO-US031243.
30-DEC-1999; 99WO-US031243.

(GETH ) GENENTECH INC

Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL;
Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME;
Goddard A, Godowski PJ, Grimaldi CJ, Gurney AL, Hillan KJ;
Kljavin IJ, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL;
Stewart TA, Tumas D, Williams PM, Wood WI;

WPI; 2000-611443/58. P-PSDB; AAB44295.

앉 Novel PRO polypeptides and polynucleotides used in detection methods, t target bioactive molecules to specific cells, and to modulate cellular activities.

Claim 2; Fig 148; 636pp; English.

AAC78458 to AAC78599 represent polynuclectide and EST (expressed sequence tag) sequences which encode secreted or transmembrane PRO polypoptides. The PRO polynuclectides and polypeptides have cytostatic activity. The polynuclectides and polypeptides can be used for detecting the presence of PRO polypeptides can be used for detecting the presence of PRO polypeptides in samples, for linking bloactive molecules to cells for specific targeting biological activities of cells, using the polypeptides for specific targeting. The polypeptide targeting can be used to Kill the target cells, e.g. for the treatment of cancers. The polypeptide pairs provide specific targeting of bloactive molecules to cells. AAC78600 to AAC78897 represent PCR primers and probes used in the isolation of the

AGCTGCCACGGGCTCTCCTGGGCTTATGGCCGGTCACACCTCAGTGTGACTCCACAGTG 1020 ö 90.0 540 720 720 780 780 840 420 420 480 480 540 600 600 999 660 240 300 300 360 09 9 TACATCTGAGCTTTATAAGCGCCCCGGGAGGAACAATGAGCTTGGTGGACACATTTCATTG CAGTGTTGCTCCATTCCTAGCTTGGGAAGCTTCCGCTTAGAGGTCCTGGCGCCTCGGCAC TGGGAGACCCATCTCTTGTGCTCCAGACTTCATCACAGGCTGCTTTTTATCAAAAGG GGAAAACTCATGCCTTTCCTTTTTAAAAATGCTTTTTTGTATTTGTCCATACGTCACTA 481 GCGCAGGGTCTACGAAGAATAGGGTGAAAAACCTCAGAAGGGAAAACTCCCAAACCAGTTG 481 GCGCAGGTCTACGAAGAATAGGGTGAAAAACCTCAGAAGGGAAAACTCCAAACTTG <u>AAAAAAAAAAAAAGCCTTTCTTCTCACAGGCATAAGACACAAATTATATATTGTTATGA</u> GGAAAACTCATGCCTTTCCTTTTAAAAATGCTTTTTTGTATTTGTCCATACGTCACTA TACATCTGAGCTTTATAAGCGCCCGGGAGGAACAATGAGCTTGGTGGACACATTTCATTG 241 GGGGTGTACACCGCGCGTGTGGACGGGTCCAAATGCAAGTGCTCCCGGAAGGGACCCAA 301 GAICCGCIACAGCGACGIGAAGAGCIGGAAATGAAGCCAAAGIACCCGCACTGCGAGGA GAAGATGGTTATCATCACCACCAAGAGCGTGTCCAGGTACCGAGGTCAGGAGCACTGCCT GCACCCCAAGCTGCAGAGCACCAAGCGCTTCATCAAGTGGTACAACGCCTGGAACGAGAA AGCACITITIACCAACGGTCAGITITIACAITITIAIAGCIGCGTGCGAAAGGCTTCCAGA 61 CGCAGCCGGAGCCAGCAGAGCCGGAAAGCCCCCGGGCAGAAAAGCCGAGCAGAGCT 181 ACGCCGCCCCCTCCGGTCAGCATGAGGCTCCTGGCGGCCGCGCTGCTGCTGCTGCT GGCGCTGTACACCGCGCGTGTGGACGGGTCCAAATGCAAGTGCTCCCGGAAGGGACCCAA 1 GCGGAGACAAGCGCAGGCGCACGCCCACAGACAGCCCTGGGCATCCACCGACGG Gaps .; 0 DB 3; Length 1685; Seguence 1685 BP; 484 A; 435 C; 387 G; 379 T; 0 U; 0 Other; 0; Indels Query Match
100.0%; Score 1685;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 1685; Conservative 0; Mismatches 601 421 601 661 661 721 721 781 781 841 841 901 901 961 241 361 61 121 8686 8 g ò d  $\dot{\delta}$ g 8 쉽 8 셤 g අ දු 8 8 g X S 셤 ઠ ઠે 셤 셤 à В ઠે δ ò 유

```
1440
                                                                                                                                                                                                                                                                                                                                                                                                                           1440
                                                                                       1140
                                                                                                                    1140
                                                                                                                                                 1200
                                                                                                                                                                              1200
                                                                                                                                                                                                                                     receaserreaggarreceasegreeseggreeserreaggereeseggarg 1260
                                                                                                                                                                                                                                                                                                    TGAGGTTCCCAACACTGTCAGCAAAAACCTTAGGAGAAAACTTAAAAATATATGAATACA 1320
                                                                                                                                                                                                                                                                                                                                   TGCGCAATACACAGCTACAGACACACATTCTGTTGACAAGGGAAAACCTTCAAAGCATGT 1380
                                                                                                                                                                                                                                                                                                                                                   TGCGCAATACACAGGTACAGACACATTCTGTTGACAAGGGAAAACCTTCAAAGGTTGT 1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTAATICITCAATGITAAACAGIGCAGICCICITTCGAAAGCIAAGAIGACCAIGCGCCC 1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1441 GTAATTCTTCAATGTTAAACAGTGCAGTCCTCTTTCGAAAGCTAAGATGACCATGCGCCC 1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITCCTCTGTACATATACCCTTAAGAACGCCCCCTCCACACACTGCCCCCAGTATATGC 1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGCTGCCACGGGCTCTCCTGGGCTTATGGCCGGTCACAGCCTCAGTGTGACTCCACAGTG 1020
                                                                                                                                                                                                             TCCCAACCTGAGGATTTCTGAAAGGTTCACAGGTTCAATATTTAATGCTTCAGAAGCATG 1260
                                                                                                                                                                                                                                                                       TGAGGTTCCCAACACTGTCAGCAAAAACCTTAGGAGAAAACTTAAAAATATATGAATACA 1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cecarreracrecrererrararecrareracarercacaaaccarraccareca 1620
                                                                                                                                                                                                                                                                                                                                                                                                               TTCTTTCCCTCACCACAACAGAACATGCAGTACTAAAGCAATATATTTGTGATTCCCCAT
                                                                                                                                                 AACATTTCCAAGATCCTGTGATGGCGAGACAAATGATCCTTAAAGAAGGTGTGGGGTCTT
                                                                                                                                                                                                                                                                                                                                                                                             TICITICCCTCACCACAGAACAGGACATGCAGTACTAAAGCAATATATTTGTGATTCCCCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTTCCTCTGTACATATACCCTTAAGACGCCCCTCCACACACTGCCCCCCAGTATATGC
                                                                                                         GTTTGCTTGCCAGAAAATGTGCTTCATTCCCCCCTGGTTAATTTTTACACACCCTAGGA
                                                                                                                                                                         AACATTTCCAAGATCCTGTGATGGCGAGACAAATGATCCTTAAAGAAGGTGTGGGCTCTT
                             GCCCCTGTAGCCGGGCAAGCAGGAGCAGGTCTCTCTGCATCTGTTCTCTGTGAGGAACTCAA
                                                       GCCCCTGTAGCCGGGCAAGCAGGAGCAGGTCTCTCTGCATCTGTTCTCTGAGGAACTCAA
                                                                                       GITIGGIIGCCAGAAAAIGIGCIICAIITCCCCCCCTGGIIAAIITIITACACACCCTAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ABS55212 standard; cDNA; 1685 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1681 AAAAA 1685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1681 AAAAA 1685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1621
                                                                                                                                                 1141
                                                                                                                                                                              1141
                                                                                                                                                                                                                                            1201
                                                                                                                                                                                                                                                                                                      1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1561
                             1021
                                                                                       1081
                                                                                                                    1081
                                                                                                                                                                                                             1201
                                                                                                                                                                                                                                                                       1261
                                                                                                                                                                                                                                                                                                                                   1321
                                                                                                                                                                                                                                                                                                                                                                1321
                                                                                                                                                                                                                                                                                                                                                                                             1381
                                                                                                                                                                                                                                                                                                                                                                                                                            1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                           1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1501
                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          장염
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8 8
                                                   g
                                                                               8
                                                                                                                                      8
                                                                                                                                                                     g
                                                                                                                                                                                                           8
                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                         8 6
                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                  g &
```

ocation/Qualifiers

Homo sapiens.

```
Human; gene; ss; Bolekine; leukocyte; immune response; chemokine; leukocyte trafficking; adhesion; endothelial cell; chemoattractant; proliferation; arthritis; ancideration; activation; systemic lugus erythematosus; arthritis; angiogenesis; systemic sclerosis; autoimmune haemolytic anaemia; thyroiditis; diabetes mellitus; renal disease; demyelinating disease; inflammatory bowel disease; autoimmune skin disease; alopecia; primary bilary cirrhosis; allergy; asthma; atopic dermatitis; food hypersensitivity; lung disease; stroke; encephalitis; multiple sclerosis; agonist; antagonist; r-lymphocyte; monouclear cell; eosinophil; polymorphonuclear neutrophil; pMN; pluripotent cell; neuronal cell; MAP2; transgenic; therapeutic; gene therapy; tumour; neovascularisation.
                                                                                                                              16-DEC-2002 (first entry)
                                                                                                                                                                             Human Bolekine cDNA
                                                                                      ABS55212;
```

```
The invention discloses a human Bolekine polypeptide, or its fragment.

Eukocytes play a important role in the immune response and the processes

by which these cells move to their appropriate destination is critical.

Chemokines are involved in leukocyte trafficking by mediating the

chemokines are involved in leukocyte trafficking by mediating the

chemokines are involved in leukocyte trafficking by mediating the

chemokines are involved in leukocyte trafficking by mediating the

chemokines are involved in leukocyte trafficking by mediating the

chemokines are involved in leukocyte trafficking by mediating the

chemokines are involved in leukocyte trafficking an immune related

chemokines in ammanal, such as systemic oblypeptide and antibodies

che disorder in a mammal, such as systemic lupus erythematosus, arthritis,

angiogenesis, systemic sclerosis, autoimmune haemolytic anaemia,

thyroiditis, diabetes mellitus, renal disease, demyelinating disease of

thyroiditis, diabetes mellitus, renal disease, an autoimmune or

immune-mediated skin disease, alopecia, psoriasis, allergic disease,

che lung, stroke, encephalitis and multiple sclerosis. The polypeptides

che lung, stroke, encephalitis and multiple sclerosis. The polypeptides

che lung, stroke, encephalitis and multiple sclerosis. The polypeptides

che antagonist by the inhibite the expression of activity of Bolekine, for

diagnosing an immune related disease in ammanal, for modulating the

diagnosing the differentiation of pluripotent cells into neuronal cells in

a mammal, where the cells differentiate to a state such that neuronal

conducting transgenic or therapeutically for tissue of ammunal and excending of therapeutically for tissue such that neuronal

chevelopment and screening of therapeutically for tissue typing and for

therapy, chromosome markers and diagnostically for tissue typing and

chevelopment and screening of therapeutically for tissue typing and

chevelopment and screening of therapeutically for tissue typing and

chevelopment and scr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Novel Bolekine polypeptide useful for identifying agonist and antagonist of the polypeptide, and for treating immune related disorder, e.g. systemic lupus erythematosus and rheumatoid arthritis in a mammal.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
100.0%; Score 1685; DB 6; Length 1685;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 1685; Conservative 0; Mismatches 0; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 1685 BP; 484 A; 435 C; 387 G; 379 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mood
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Roth I,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Goddard A, Hillan KJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 3; Fig 1; 63pp; English.
                                                                                                                                                                                                                                                                                                                                                03-NOV-1997; 97US-0064249P.
27-ARR-1998; 98US-0083336P.
08-MAR-1999; 99WO-US005028.
18-FEB-2000; 2000WO-US006441.
02-MAR-2000; 2000WO-US005841.
                                                                                                                                                                                                                                                                                                          22-MAR-2001; 2001US-00816920.
                                                                                   167. .502
/*tag= a
/product= "
167. .268
/*tag= b
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (GETH ) GENENTECH INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2002-740172/80.
P-PSDB; ABG70798.
                                                                                                                                                                                                                         US2002119118-A1
                                                                                                                                                                                                                                                                 29-AUG-2002
                                                                                                                                                        sig_peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Fong S,
```

..

1091 GTTTGGTTGCCAGAAAATGTGCTTCATTCCCCCCTGGTTAATTTTTACACACCCTTAGA 1140   1141 AACATTTCCAAGAACTGTGATGGCGACAAAATGATCCTTAAAGAAGGTGTGGGGGTCTT 1200   1141 AACATTTCCAAGATCCTGTGATGGCGACAAAATGATCCTTAAAAAAAA	RESULT 5 ACD42738 ID ACD42738 standard; CDNA; 1685 BP. XX AC ACD42738; XX AC ACD42738; XX AC ACD42738; XX BY O9-SEP-2003 (first entry) XX XX W Human secreted and transmembrane protein PRO273 CDNA. XX XX Human; secreted and transmembrane protein, PRO; virucide; gene therapy; XX XX Human; secreted and transmembrane protein, PRO; virucide; gene therapy; XX XX Homo sapiens. XX
	AGCACTTTTTACCAAGGTCAGTTTTTACATTTTATAGTGCGGGGGGGG

98US-0008 98US-0008 98US-0008 98US-0008 98US-0008 98US-0009	99048 - 010 20 20 20 20 20 20 20 20 20 20 20 20 20
15-MAY-1998; 18 MAY-1998; 18 MAY-1998; 22 MAY-1998; 22 MAY-1998; 22 MAY-1998; 22 MAY-1998; 22 MAY-1998; 22 MAY-1998; 23 MAY-1998; 24 MAY-1998; 26 JUN-1998; 26 JUN-1998; 27 MAY-1998; 28 MAY-1998; 27 MAY-1998; 28 MAY-1998; 29 MAY-1998; 20 MAY-1998; 21 DEC-1998; 22 DEC-1998; 23 DEC-1998; 23 DEC-1998; 24 MAY-1999; 25 MAY-1999; 26 MAY-1999; 27 MAY-1999; 28 MAY-1999; 28 MAY-1999; 29 MAY-1999; 29 MAY-1999; 20 MAY-1999;	12-MAR-11999 12-MAR-11999 12-MAR-11999 12-MAR-11999 14-MAY-11999 14-MAY-11999 14-MAY-11999 14-MAY-11999 14-MAY-11999 14-MAY-11999 16-JUL -1999 16-JUL -1999 17-MAR -2000 11-FEB -2000 11-FEB -2000 11-MAR -2000 11-MAR -2000 11-MAR -2000 11-MAR -2000 11-MAR -2000 11-MAR -2000 11-MAR -2000 11-MAR -2000 11-MAR -2000 12-MAR -2000 12-MAR -2000 13-MAR -2000 13-MAR -2000 14-MAR -2000 15-MAR -2000 16-JUL -2000 17-MAR -2000 18-MAR -2000 18
	######################################
22.541 23.541 24.541 25.541 26.541	28 28 28 28 28 28 28 28 28 28 28 28 28 2
98US-0077791P. 98US-00780020 98US-0078818EP. 98US-0078818EP. 98US-0078818EP. 98US-0078818EP. 98US-0079294P. 98US-0079294P. 98US-0079664P. 98US-0079681P. 98US-0079681P. 98US-0079681P. 98US-0079681P. 98US-0079681P. 98US-0080105P. 98US-0080134P. 98US-0080134P. 98US-0080134P. 98US-0080134P. 98US-0080134P. 98US-0080134P. 98US-0080134P.	9805.0081319P99805.0081319P99805.00813182P99805.0081295P99805.00812700P99805.00812700P99805.00812700P99805.00812700P99805.0081258P99805.0081238P99805.00812338P99805.00812338P99805.00812338P99805.00812338P99805.00812338P99805.00812338P99805.00812338P99805.00812338P99805.00812338P99805.00812338P99805.00812338P99805.00812338P99805.00812338P99805.00812338P99805.00812338P99805.00812338P99805.00812338P99805.00812338P99999605.00812338P999999605.00812338P99999999999999999999999999999999999
	15. APR-1998; 15. APR-1998; 15. APR-1998; 21. APR-1998; 22. APR-1998; 22. APR-1998; 22. APR-1998; 22. APR-1998; 23. APR-1998; 24. APR-1998; 25. APR-1998; 26. APR-1998; 27. APR-1998; 28. APR-1998; 29. APR-1998; 20. APR-1998; 20
	E K E K E E E E E E E E E E E E E E E E

us-09-978-189-369.rng

```
1021 GCCCTGTAGCCGGGCAAGCAGCAGCACCTCTCTGCATCTGTTCTCTGAGGAACTCAA 1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1021 GCCCCTGTAGCCGGGCAAGCAGGAGCAGGTCTCTCTGTGTTCTCTGAGGAACTCAA 1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1081 GTTTGGTTGCCAGAAAAATGTGCTTCATTCCCCCCTGGTTAATTTTTACACACCCTAGGA 1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            961 AGCTGCCACGGGCTCTCCTGGGCTTATGGCCGGTCACAGCCTCAGTGTGACTCCACAGTG 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1141 AACATTTCCAAGATCCTGTGATGGCGAGACAAATGATCCTTAAAGAAGGTGTGGGGGTCTT 1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1261 TGAGGTTCCCAACACTGTCAGCAAAAACCTTAGGAGAAAACTTAAAAATATATGAATACA 1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1381 TICTTICCCTCACCACAACAGAACAIGCAGIACIAAAGCAAIAIAITIGIGATICCCCAI 1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1441 GTAATTCTTCAATGTTAAACAGTGCAGTCCTCTTTCGAAAGCTAAGATGACCATGCGCCC 1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1201 TCCCAACCTGAGGATTTCTGAAAGGTTCACAGGTTCAATATTTAATGCTTCAGAAGCATG 1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1201 receasecreasearricisasaserreacaserrearararraarserreasasears 1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGCGCAATACACAGCTACAGACACACTTCTGTTGACAAGGGAAAACCTTCAAAGCATGT 1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1441 GTAATTCTTCAATGTTAAACAGTGCAGTCCTCTTTCGAAAGCTAAGATGACCATGCGCCC 1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 901 CAGTGTTGCTCCATTCCTAGCTTGGGAAGCTTCCGCTTAGAGGTCCTGGCGCCTCGGCAC 960
                                                                                                                                                                 840
                                                                                                                                                                                                                                          781 GGAAAACTCATGCCTTTTTTAAAAATGCTTTTTTGTATTTGTCCATACGTCACTA 840
                                                                             721 TGGGAGACCCATCTCTCTTGTGCTCCAGACTTCATCACAGGCTGCTTTTTATCAAAAGG 780
                                                                                                                                                                                                                                                                                                        841 TACATCTGAGCTTTATAAGCGCCCGGGAGGAACAATGAGCTTGGTGGACACTTTCATTG 900
           601 AAAAAAAAAAAGCCTTTCTTTCTCACAGGCATAAGACACAAATTATATATGTTATGA 660
                                                                                                                                                                                                                                                                                                                                        HAI TACATCTGAGCTTTATAAGCGCCCGGGAGGAACAATGAGCTTGGTGGACACATTTCATTG
                                                                                                                                                                                                                        GGAAAACTCATGCCTTTTTTAAAAATGCTTTTTTGTATTTGTCCATACGTCACTA
                                                                                                                                                                                                                                                                                                                                                                                        901 CAGTGTTGCTCCATTCCTAGCTTGGGAAGCTTCCGCCTTAGAGGTCCTGGCGCCTCGGCAC
                                                    1081 GTTTGGTTGCCAGAAAATGTGCTTCATTCCCCCCTGGTTAATTTTTACACACCCTAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1141 AACATITCCAAGAICCTGTGAGGGGAGACAAATGATCCTTAAAGAAGGTGTGGGGTCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGAGGTTCCCAACACTGTCAGCAAAAACCTTAGGAGAAAACTTAAAAATATATGAATACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTCTTTCCCTCACCACCACAGAACATGCAGTACTAAAGCAATATATTTGTGATTCCCCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAAAA 1685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1681 AAAAA 1685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1561
                                                                                                                                                                                                                      781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1261
                                                                                  셤
                                                                                                                                 à
                                                                                                                                                                    g
                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                        a
                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                            ď
                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61 CGCAGCCGGAGCCAGCAGAGCCGGAAGGCGCCCCGGGCAGAGAAAGCCGAGCAGAGCT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121 GGGTGGCGTCTCCGGGCCGCCTCCGACGGCCCAGCGCCCTCCCCATGTCCCTGCTCCC 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121 GGGTGGCGTCTCCGGGCCGCCTCCGACGGGCCAGCGCCCTCCCCCATGTCCCTGCTCCC 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         241 GGCGCTGTACACCGCGCGTGTGGACGGGTCCAAATGCAAGTGCTCCCGGAAGGGACCCAA 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241 Gedecheracededecerergacegerceaarecaagecreecegaageareceaa 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301 GATCCGCTACAGCGACGTGAAGAAGCTGGAAATGAAGCCAAAGTACCCGCACTGCGAGGA 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        301 GATCCGCTACAGCGACGTGAAGAAGCTGGAAATGAAGCCAAAAGTACCCGGACTACGGAGGA 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAAGATGGTTATCATCACCACCAAGAGCGTGTCCAAGGTACCGAGGTCAGGAGCACTGCCT 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCACCCCAAGCTGCAGAGCACCAAGCGCTTCATCAAGTGGTACAACGCCTGGAACGAGAA 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        421 GCACCCCAAGCTGCAGGAGCACCAAGCGCTTCATCAAGTGGTACAACGCCTGGAACGAGAA 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   481 GCGCAGGGTCTACGAAGAATAGGGTGAAAAACCTCAGAAGGGGAAAACTCCCAAACCAGTTG 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            601 AAAAAAAAAAAGCTTTCTCTCACAGGCATAAGACACAAATTATATATTGTTATG 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 GCGGAGACACAGGGCAGGGCACGGCCACAGACAGCCTGGGCATCCACCGACGG 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 GCGGAGACAAGCGCAGAGCGCACGCCCACAGACAGCCCTGGGCATCCACCGACGG 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           361 GAAGATGGTTATCATCACCACCAAGAGCGTGTCCAGGTACCGAGGTCAGGAGCACTGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%; Score 1685; DB 7; Length 1685;
100.0%; Pred. No. 0;
tive 0; Mismatches 0; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 I, Baker KP, Botstein D, Desnoyers L, Eaton DL;
Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME;
08-NOV-2000; 2000US-070923B.
7-NOV-2000; 2000US-07073749.
01-DBC-2000; 2000US-0773749.
20-DEC-2000; 2000US-077259.
20-DEC-2000; 2000WO-US034956.
28-FBB-2001; 2000WO-US034956.
22-MAR-2001; 2001US-00816744.
22-MAR-2001; 2001US-00816749.
22-MAR-2001; 2001US-00816749.
22-MAR-2001; 2001US-00816740.
22-MAR-2001; 2001US-00816740.
25-MAY-2001; 2001US-00816780.
25-MAY-2001; 2001US-0081780.
25-MAY-2001; 2001US-0081780.
25-MAY-2001; 2001US-0081780.
25-MAY-2001; 2001US-0081780.
25-MAY-2001; 2001US-00816363.
26-MUN-2001; 2001US-00886342.
26-MUN-2001; 2001US-00886342.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 100.0%;
Best Local Similarity 100.0%;
Matches 1685; Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                          09-JUL-2001; 2001WO-US021735
30-JUL-2001; 2001US-00918585
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (GETH ) GENENTECH INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ashkenazi AJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ferrara N,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   421
```

8 6

8 8

8 8 8

유

के व

8 6 6 6

8 8

8 8 8

```
Human, secreted and transmembrane protein, PRO; antiinflammatory; antiateriosclerotic; cardiant; anti-infertility; anti-HIV; cytostatic; antidiabetic; gene therapy; inflammatory disease; organ failure; artherosclerosis; cardiac injury; infertility; birth defect; premature aging; AIDS; cancer; diabetic complication; chromosome mapping; gene mapping; pharmaceutical; diagnostic; biosensor; bioreactor; tissue typing; gene; 8s.
                                                                                                                                                   Novel human secreted and transmembrane protein PRO273 cDNA.
                                       ACA63773 standard; cDNA; 1685 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      97US-0064249P.
97US-00656449P.
97US-0066564P.
97US-0066564P.
98US-0077641P.
98US-0077641P.
98US-0077641P.
98US-0077641P.
98US-0077641P.
98US-0077641P.
98US-0077641P.
98US-0077641P.
98US-0077641P.
98US-0079294P.
98US-0079294P.
98US-0079294P.
98US-0079237P.
98US-0079237P.
98US-0079337P.
98US-0080107P.
98US-0080137P.
                                                                                                                16-JUN-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                          US2002192706-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17-OCT-1997;
03-NOV-1997;
13-NOV-1997;
10-MAR-1998;
11-MAR-1998;
11-MAR-1998;
11-MAR-1998;
12-MAR-1998;
13-MAR-1998;
13-MAR-1998;
13-MAR-1998;
20-MAR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20 - MAR - 1998 | 20 - MAR - 1998 | 20 - MAR - 1998 | 25 - MAR - 1998 | 25 - MAR - 1998 | 25 - MAR - 1998 | 27 - MAR - 1998 | 21 - MAR - 1
                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       24-OCT-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                 19-DEC-2002
                                                                            ACA63773;
```

```
The invention describes an isolated nucleic acid (I) comprising, or which is at least 80 % sequence identity to, or the full-length coding sequence of, any of 118 300-2100 nucleotide sequences, which encodes its corresponding PRO polypeptide selected from 118 100-700 amino acid sequences, all given in the specification. The nucleic acids and polypeptides are useful for treating inflammatory diseases, organ failure, atherosclerosis, cardiac injury, infertility, birth defects, premature aging, AIDS, cancer, or diabetic complications. The nucleic acids are useful as hybridisation probes, in chromosome and gene mapping, and in generating antisense RNA or DNA. The polypeptides are useful as pharmaccuticals, diagnostics, biosensors or bioreactors. Both are useful
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New secreted and transmembrane nucleic acids and polypeptides, designated as PRO, useful for treating inflammation, organ failure, atherosclerosis, cardiac injury, infertility, birth defects, premature aging, AIDS, or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL;
Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME;
Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ;
Kljavin IJ, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL;
Stewart TA, Tumas D, Williams PM, Wood WI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 2; Fig 148; 453pp; English.
22-APR-1998; 98US-0082700P.
22-APR-1998; 98US-0082704P.
22-APR-1998; 98US-0082704P.
22-APR-1998; 98US-0082804P.
22-APR-1998; 98US-0082804P.
22-APR-1998; 98US-0082804P.
20-NOV-1998; 98US-0082804P.
20-NOV-1998; 98US-0082865.
10-MAR-1999; 99WO-US001802.
20-MAV-1999; 99WO-US001802.
20-MAV-1999; 99WO-US001802.
20-MAV-1999; 99WO-US001802.
20-MAR-1999; 99WO-US001802.
20-MAR-2000; 90WO-US00180.
21-PEB-2000; 90WO-US00180.
21-PEB-2000; 2000WO-US00376.
21-PEB-2000; 2000WO-US00376.
21-PEB-2000; 2000WO-US00376.
21-MAR-2000; 2000WO-US00376.
21-MAR-2000; 2000WO-US00376.
21-MAR-2000; 2000WO-US00376.
21-MAR-2000; 2000WO-US00376.
22-MAR-2000; 2000WO-US00376.
23-MAR-2000; 2000WO-US00376.
24-AUG-2000; 2000WO-US00376.
25-MAY-2000; 2000WO-US00376.
26-UN-2001; 2010WO-US01378.
21-MAR-2000; 2000WO-US00376.
22-MAR-2000; 2000WO-US00376.
23-MAY-2000; 2000WO-US00376.
24-AUG-2000; 2000WO-US01378.
26-UUN-2001; 2011WO-US01378.
27-MAY-2001; 2011WO-US01378.
28-UUN-2001; 2011WO-US01378.
29-UUN-2001; 2011WO-US01378.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (GETH ) GENENTECH INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WFI; 2003-328860/31.
P-PSDB; ABU72247.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           cancer.
```

human secreted This sequence encodes a novel polypeptide in tissue typing. transmembrane PRO SSSS

20.04.04

O

104 1101

00T-0/0-00-00

AGCTGCCACGGGCTCTCCTGGGCTTATGGCCGGTCACAGCCTCAGTGTGACTCCACAGTG

DB 7; Length 1685; T; 0 U; 0 Other; 100.0%; Score 1685; 100.0%; Pred. No. 0; ive 0; Mismatches Sequence 1685 BP; 484 A; 435 C; 387 G; 379 Query Match
Best Local Similarity 100.
Matches 1685; Conservative

ö

Gaps

·.

0; Indels

g

ò

d

à

g δ

8

840 720 720 780 780 840 900 900 960 120 120 180 180 240 300 GGCGCTGTACACCCGCGCGTGGACGGGTCCAAATGCAAGTGCTCCCGGAAGGGACCCAA 300 360 360 420 420 480 ecaccecaágeriscaegadeacecardearcarcaagracaacecerseaaceaaceaaa 480 540 909 999 9 9 CAGTGTTGCTCCATTCCTAGCTTGGGAAGCTTCCGCTTAGAGGTCCTGGCGCCTCGGCAC CAGIGITIGE CALCOTAGCTAGGAAGCITCCGCTTAGAGGTCCTGGCCTCGGCAC GGAAAACTCATGCCTTTTTTAAAAAAGCTTTTTTGTATTTGTACTCCATACGTCACTA GATCCGCTACAGCGACGTGAAGAAGCTGGAAATGAAGCCAAAGTACCCGCACCACTGCGAGGA GCGCAGGGTCTACGAAGAATAGGGTGAAAAACCTCAGAAAGGGAAAACTCCAAACCAGTTG TGGGAGACCCATCTCTTGTGCTCCAGACTTCATCACAGGCTGCTTTTTATCAAAAGG TGGGAGACCCATCTCTCTGTGCTCCCAGACTTCATCACAGGCTGCTTTTTATCAAAAGG GGAAAACTCATGCCTTTCCTTTTAAAAAATGCTTTTTTGTTTTGTCCATACGTCACTA TACATCTGAGCTTTATAAGCGCCCCGGGAGGAACAATGAGCTTGGTGGACACATTTCATTG CGCAGCCGGAGCCAGCAGAGCCGCGCCCCCCGGCCAGAAAGCCGAGCAGAGCT GGGTGGCGTCCGGGCCGCCGCCGCCGACGGCCAGCGCCCTCCCCATGTCCTGCTCCC GGCGCTGTACACCGCGCGTGTGGACGGGTCCAAATGCAAGTGCTCCCGGAAGGGAACCCAA GATCCGCTACAGCGACGTGAAGAAGCTGGAAATGAAGCCAAAGTACCCGCACTGCGAGGA GAAGATGGTTATCATCACCACCAAGAGGGTGTCCAGGTACCGAGGTCAGGAGCACTGCCT GAAGATGGTTATCATCACCACCAGGGGGGTCCAGGTACCGAGGTCAGGAGCACTGCCT AAAAAAAAAAAAAGCCTTTCTCTCACAGGCATAAGACACAAATTATATTGTTATGA GCGGAGACACAGAGCGCAGCGCACGCCACAGACAGCCCTGGGCATCCACCGACGG GGGTGGCGTCTCCGGGCCGCCGCTCCGACGGCCCAGCGCCCTCCCCATGTCCCTGCTCCC ACGCCCCCCCCCCCCGGTCAGCATGAGGCTCCTGGCGGCCGCGCTGCTGCTGCTGCT 841 Н 241 361 421 481 541 601 601 721 781 781 901 901 61 61 121 121 181 181 241 301 301 361 421 481 541 661 721

8 & 8

ò 유 장

6 B

g ò ద 상 원

Dp

ò

임 ઠે 음 & 8 8

8 8 8 a

1200 1560 1020 1080 1140 1200 1260 1260 1320 1380 1380 1440 1500 1500 1560 1620 1620 disease; 1441 GTAATTCTTCAATGTTAAACAGTGCAGTCCTCTTTCGAAAGCTAAGATGACCATGCGCCC Human, Bolekine, T-lymphocyte proliferation, immune related disorder, systemic lupus erythematosis, rheumatoid arthritis, osteoarthritis, juvenile chronic arthritis, spondyloarthropathy, systemic sclerosis, idiopathic inflammatory myopathy; Sjogren's syndrome, gene, systemic vasculitis, sarcoidosis, autoimmune haemolytic anaemia, autoimmune thromobocytopaenia, thyroiditis, diabetes mellitus, immune-mediated renal disease, demyelinating polymeuropathy; Guillen-Barre sidiopathic demyelinating polymeuropathy; Guillen-Barre shodrome, chronic inflammatory demyelinating polymeuropathy; hepatobiliary diseach chronic primary biliary cirrhosis; granulomatous hepatitis; GCCCCTGTAGCCGGGCAAGCAGGAGCAGTCTCTCTGCATCTGTTCTCTGAGGAACTCAA TCCCAACCTGAGGATTTCTGAAAGGTTCACAGGTTCAATATTTAATGCTTCAGAAGCATG GTAATITCITCAAIGITAAACAGIGCAGICCICITITCGAAAGCIAAGAIGACCAIGCGCCC 961 AGCTGCCACGGGCTCTCCTGGGCTTATGGCCGGTCACAGCCTCAGTGTGACTCCACAGG 1081 GITTGGTTGCCAGAAAATGTGCTTCATTCCCCCCTGGTTAATTTTTACACACCCTAGGA 1141 AACATTTCCAAGATCCTGTGATGGCGAGACAAATGATCCTTAAAGAAGGTGTGGGGGTCTT 1261 IGAGGITCCCGACACTGICAGCAAAAACCITAGGAGAAAACTIAAAAATATATGAATACA TICITICCCICACACACAGAACAIGCAGIACIAAAGCAAIAIAIIIGIGAIIICCCCAI TTCTTTCCCTCACCACACAGAACATGCAGTACTAAAGCAATATATTGTGATTCCCCAT TITCCTCTGTACATATACCCTTAAGAACGCCCCCTCCACACACTGCCCCCCAGTATATGC trrecreteracaratacecriaagaacececerecacacacacecececeagiaratec GCCCCTGTAGCCGGGCAAGCAGGAGCAGGTCTCTCTGCATCTGTTCTCTGTGAGGAACTCAA GTTTGGTTGCCAGAAAATGTGCTTCATTCCCCCCTGGTTAATTTTTACACACCCTAGGA TGAGGTTCCCAACACTGTCAGCAAAAACCTTAGGAGAAAAACTTAAAAATATATGAATACA TGCGCAATACACACCTACAGACACACATTCTGTTGACAAGGGAAAACCTTCAAAGCATGT 1321 rececantacacaccracacacacacatrererresasasasasasacerresasascarer Nucleotide sequence of Human Bolekine ABV72423 standard; cDNA; 1685 (first entry) AAAAA 1685 1681 AAAAA 1685 29-JAN-2003 1141 1501 1561 1621 1681 1021 1021 1081 1201 1261 1321 1381 1381 1441 1501 1561 1621 ABV72423; 961 ABV72423 RESULT g 셤 셤 ò g ઠે 셤 ઠ 엄 ठ g ò ò 셤 ò 셤 ò 셤 ò g g ò 유 Š 8

sclerosing cholangitis; inflammatory bowel disease; gluten-sensitive enteropathy; Whipple's disease; skin disease; erythem enteropathy; Whipple's disease; skin disease; alerydyforme; contact dermatitis; psoriasis; alleryy; asthma; alleryd; rhinitis; atopic dermatitis; food hypersensitivity; urticaria; eosinophilic pneumonia; idiopathic pulmonary fibrosis; hypersensitivity pneumonitis; graft rejection; graft-versus-host disease; gene therapy; ss.

엄 ò 유 ò 셤 ò 셤 8 엄 ઠ a ਨੇ g ઠે g ò

Homo sapiens.

Key Location/Qualifiers
CDS 167. :502
/\*tag= a /product= "Bolekine"
sig\_peptide 167. :268
/\*tag= b /\*tag= b

WO200277028-A1.

03-OCT-2002.

22-MAR-2001; 2001WO-US009552

22-MAR-2001; 2001WO-US009552.

(GETH ) GENENTECH INC.

Fong S, Goddard A, Hillan KJ, Roth I, Wood WI;

WPI; 2003-018887/01. P-PSDB; ABB99340. New Bolekine polypeptides and encoding nucleic acids, useful for treating an immune related disorder such as systemic lupus erythematosis, rheumatoid arthritis, psoriasis, asthma, allergic rhinitis and atopic dermatitis.

Claim 3; Fig 1; 96pp; English.

The present sequence encodes a human Bolekine polypeptide. Bolekine polypeptides are active stimulators of the proliferation of Traphocytes. Bolekine polypeptides and polymucleotides are useful for treating an immune related disorder e.g. systemic lupus erythematosis, rheumatoid arthritis, osteoarthritis, juvenile chronic arthritis, a systemic sclerosis, an idiopathic inflammatory myopathy, Sjogren's syndrome, systemic vasculitis, sarcoidosis, autoimmune haemolytic anaemia, autoimmune thrombocytopaenia, thyroiditis, diabetes mellitus, immune-mediated renal disease, a chyroiditis, diabetes mellitus, immune-mediated renal disease, a chyroiditis, diabetes mellitus, immune-mediated renal disease, a chronic inflammatory demyelinating polymeuropathy, a hepatobiliary disease, infectious or autoimmune chronic active hepatitis, primary chronic inflammatory bowell disease, soluten-sensitive enteropathy, Mhipple's disease, arthres multiforme, contact dermatitis, psoriasis, an allergic inflammatory bowell disease, gluten-sensitive enteropathy, Mhipple's disease, arthres multiforme, contact dermatitis, psoriasis, an allergic chinitis, atopic desamentis, psoriasis, an allergic chinitis, atopic disease of the lung, eosinophilic pneumoniae, idiopathic pulmonary fibrosis, hypersensitivity, urricaria, an immunologic disease of the lung, graft versus-host disease. The Bolekine polypeptides and encoding nucleic adid molecules can also be used as hybridization probes, for generation or chromosome identification and tissue typing

셤

8 8 8 8

Sequence 1685 BP; 484 A; 435 C; 387 G; 379 T; 0 U; 0 Other;

g

8 G

8 6

8 6

Query Match 100.0%; Score 1685; DB 7; Length 1685; Best Local Similarity 100.0%; Pred. No. 0; Marches 1685; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 GCGGAGACAAGCGCAGAGCGCACGGCCACAGACAGCCCTGGGCATCCACCGACGG 60

1140 1140 1020 009 840 960 960 120 180 180 240 240 300 300 360 360 420 420 480 480 540 540 009 9 099 720 720 780 780 840 900 900 120 AAAAAAAAAAAGCCTTTCTTCTCACAGGCATAAGACACAAATTATATATTTTTTATGA 841 TACATCTGAGCTTTATAAGCGCCCGGAGGAACAATGAGCTTGGTGGACACATTTCATTG CAGTGTTGCTCCATTCCTAGCTTGGGAAGCTTCCGCTTAGAGGTCCTGGCGCCTCGGCAC 241 GGCGCTGTACACCGCGCGTGTGGACGAGGCCAAATGCAAGTGCTCCCGGAAGGGACCAA GCGCAGGGTCTACGAAGAATAGGGTGAAAACCTCAGAAGGGAAAACTCCAAACCAGTTG AAAAAAAAAAAGCCTTTCTTCTCACAGGCATAAGACACAAAATTATATGTTATGA AGCACTITITACCAACGGTCAGTTTTTACATTTTATAGCTGCGTGCGAAAGGCTTCCAGA 661 Agcacritriraccaaceercaerririracaritrirafaecrecereceaaaecritceaea TGGGAGACCCATCTTTTTGTGCTCCAGACTTCACAGGCTGCTTTTTATCAAAAAGG 721 IGGGAGACCCATCTCTTGTGCTCCAGACTTCATCACAGGCTGCTTTTTATCAAAAGG GGAAAACTCATGCCTTTCCTTTTAAAAATGCTTTTTTTGTATTTGTCCATACGTCACTA TACATCTGAGCTTTATAAGCGCCCGGGAAGAACAATGAGCTTGGTGGACACATTTCATTG AGCTGCCACGGGCTCTCCTGGGCTTATGGCCGGTCACAGCCTCAGTGTCCACAGTG 961 AGCTGCCACGGGCTCTCCTGGGCTTATGGCCGGTCACAGCCTCAGTGTGACTCCACAGTG GCCCCTGTAGCCGGGCAAGCAGGAGCAGGTCTCTCTGCATCTGTTCTCTGAGGAACTCAA GITIGGITGCCAGAAAATGTGCTTCATTCCCCCCTGGTTAATTTTTACACACCCTAGGA cecaecceaaccaecaeaecceaaaecceacceccceeecaaaaacceacaeaecr 121 GGGTGCGTCTCCGGGCCGCCGCTCCGACGGCCAGCGCCCTCCCCATGTCCCTGCTCCC Aceccececercesarchecareasericerescescescescerecrecrecrecre GECECTETACACCECECETETGACGGTCCAAATGCAAGTGCTCCCGGAAGGGACCCAA GATCCGCTACAGCGACGTGAAGAAGCTGGAAATGAAGCCAAAGTACCCGCACTGCGAGGA GAAGATGGTTATCATCACCACCAGGTGTCCAGGTACCGAGGTCAGGAGCACTGCCT GCACCCCAAGCTGCAGAGCACCAAGCGCTTCATCAAGTGGTACAACGCCTGGAACGAAA GGGTGGCGTCTCCGGCCGCTCCGACGGGCCAGCGCCCTCCCCATGTCCCTGCTCCC 181 ACGCCCCCCCCCCCCGGTCAGCATGAGGCTCCTGGCGGCCGCCGCTGCTGCTGCTGCT CGCAGCCGGAGCCCAGAGCCGGAAGGCGCCCCCGGGCAGAGAAAGCCGAGAGCTT 841 961 1021 1081 61 121 181 301 361 361 421 421 481 541 541 601 601 661 721 781 781 901 241 301 481 61

```
2000WO-US013705.
2000WO-US014042.
2000WO-US014941.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; 2001WO-US006520.
; 2001US-00816744.
; 2001US-00816920.
; 2001WO-US009552.
     98US-0077450P-98US-00776432P-98US-00776432P-98US-0077649P-98US-0077649P-98US-00778918P-98US-0079594P-98US-0079564P-98US-0079564P-98US-0079564P-98US-0079520P-98US-007954P-98US-007954P-98US-007958P-98US-007954P-98US-007954
                                                                                                                                                                                                                                                                                                     99WO-USOSSI90.
99US-00267213.
99US-00284291.
99US-00311832.
99WO-USO10733.
                                                                                                                                                                                                                                                                                                                                                             99US-00380137.
99US-00380138.
99US-00380142.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2000WO-US004341.
2000WO-US005004.
2000WO-US005841.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2000WO-US006319.
2000WO-US007532.
2000WO-US008439.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          2000WO-US000277
2000WO-US000376
2000WO-US003565
                                                                                                                                                                                                                                                                                                                                                                                                                                        99WO-US031274
2000WO-US000219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                10-MAR-2000;
21-MAR-2000;
17-MAY-2000;
22-MAY-2000;
30-MAY-2000;
28-JUN-2000;
28-JUN-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                          06-JAN-2000;
06-JAN-2000;
11-FEB-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     18-FEB-2000;
24-FEB-2000;
02-MAR-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   22-MAR-2001;
22-MAR-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         24-AUG-2000;
08-NOV-2000;
                                                                                                                                                                                                                                                                                                                         12-APR-1999;
14-MAY-1999;
14-MAY-1999;
02-JUN-1999;
25-AUG-1999;
1260
                                                                                                                                                                                                                                                                      1621 GGTTTCATATTCTTTCTAAGATGGAAGTAATAAAATATATTTGAAATGTAAAAAA 1680
                                                                                                                                                                                                           1501 TITCCICIGIACAIAIACCCIIDAGAACGCCCCCCCCCCACACACIGCCCCCCAGAIAIGC 1560
                                                                                                                                                                                                                                                                                  AACATTTCCAAGATCCTGTGATGGCGAGACAAATGATCCTTAAAGAAGGTGTGGGGTCTT 1200
                                                              receaacerdaddarrrergaaadgrreacaggrreaararrrraargerreagaagcard 1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; ss; gene; thrombolytic agent; interferon; interleukin; cytokine; erythropoietin; colony stimulating factor; cancer; colorectal carcinoma; apoptosis related condition; AIDS amyotrophic lateral sclerosis; inflammatory disease; asthma; atherosclerosis; neurodegenerative disease; gastrointestinal disorder; Alzheimer's disease; Parkinson's disease; pypertension; myocardial ischaemia; kidhey disease; carcinogenesis; plomerulonephritis; lung disease; plumonary hypertension; preeclampsia; bronchial asthma; gastric ulcer; renal failure; cardiovascular disease; inflammatory bowel disease; reproductive disorder; premature labour.
         1141 AACATTTCCAAGATCCTGTGATGGCGAGACAAATGATCCTTAAAGAAGGTGTGGGGTCTT 1200
                                                                                             TCCCAACCTGAGGATTTCTGAAAGGTTCACAGGTTCAATATTTAATGCTTCAGAAGCATG
                                                                                                                                                        TICITICCCTCACCACAACAGAACATGCAGTACTAAAAGCAATATATTGTGATTCCCCAT
                                                                                                                                                                          TTCTTTCCCTCACCACACACATGCAGTACTAAAGCAATATATTTGTGATTCCCCAT
                                                                                                                                                                                                                                  GTAATTCTTCAATGTTAAACAGTGCAGTCCTCTTTCGAAAGCTAAGATGACCATGCGCCC
                                                                                 TGAGGTTCCCAACACTGTCAGCAAAACCTTAGGAGAAAACTTAAAAAATATATGAATACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human secreted and transmembrane PRO polypeptide #3 cDNA
                                                                                                                                                                                                                                                                                                                                                                                                               ACA71937 standard; cDNA; 1685 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             97US-0062250P.
97US-0064249P.
97US-0065311P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15-OCT-2001; 2001US-00978192
                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                AAAAA 1685
                                                                                                                                                                                                                                                                                                                                                                   AAAAA 1685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US2002177553-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17-OCT-1997;
03-NOV-1997;
13-NOV-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                     11-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        28-NOV-2002
                                                                                                                                                                                                                                                                                                                                                 1681
                                                                                                                                                                                                                                                                                                                                                                  1681
                                                                                                                                                                                                                                                                                                                                                                                                                                  ACA71937;
                           1141
                                                                                                   1261
                                                                                                                                                                                                                                                                         1561
                                                                                                                                                                                                                                                                                         1561
                                                                                                                                                                                                                                                                                                            1621
                                             1201
                                                               1201
                                                                                  1261
                                                                                                                      1321
                                                                                                                                        1321
                                                                                                                                                          1381
                                                                                                                                                                             1381
                                                                                                                                                                                                1441
                                                                                                                                                                                                                                     1501
                                                                                                                                                                                                                                                                                                                                                                                                         ACA71937
                                                                                                                                                                                                                                                                                                                                                                                               RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                          ద
                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                 ઠ
                                            à
                                                             d
                                                                                  ठे
                                                                                                g
                                                                                                                                                                        g
                                                                                                                                                                                               ò
                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                  \dot{\delta}
                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                            à
                                                                                                                      ò
                                                                                                                                       g
                                                                                                                                                        8
```

```
Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL; Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME; Goddard A, Godowski PJ, Grimalali JC, Gurney AL, Hillan KJ; Klo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL; Stewart TA, Tumas D, Williams PM, Wood WI;
                                                                                                                                                                                                                                                                New isolated PRO polypeptides e.g. PRO213, PRO274 and PRO300, for use as pharmaceuticals, diagnostics, biosensors and bioreactors, for identifying modulators of receptor-ligand interactions.
                                                                                                                                                                                                                                                                                                            Claim 2; SEQ ID NO 369; 55pp; English.
10-MAY-2001, 2001US-00854208.
25-MAY-2001, 2001US-00854280.
25-MAY-2001, 2001US-00872035.
01-JUN-2001, 2001WS-00875035.
01-JUN-2001, 2001WS-0087503.
14-JUN-2001, 2001US-00886342.
29-JUN-2001, 2001WS-00886342.
29-JUN-2001, 2001WS-US019692.
29-JUN-2001, 2001WS-US01966.
09-JUL-2001, 2001WS-US01966.
                                                                                                                                           (GETH ) GENENTECH INC.
                                                                                                                                                                                                                                  WPI; 2003-328499/31.
                                                                                                                                                                                                                                            P-PSDB; ABU84927.
```

The invention relates to an isolated secreted and transmembrane polypeptide, designated as PRO polypeptide. The PRO polypeptide is useful in the pro polypeptide is useful for inking a bloactive medecule no a cell. The PRO polypeptide is useful for inking a bloactive medecule to a cell. The PRO polypeptide or antibody against it is useful for medulating a bloogical activity of a nutibody against it is useful for medulating a bloogical activity of a cell. The PRO polypeptide is useful in industrial applications including planamaceuticals, diagnostics, blosensors and bioreactors. The PRO polypeptide is a thrombolytic agent, interferon, interleukin, exptropoietin, colony stimulating factor and other opolopeptide is also useful for treating disease such as cancer e.g. colorectal carcinoma; apoptosis related conditions e.g. AIDS, amyotrophic lateral carcinoma; apoptosis related conditions e.g. AIDS, and present solopeptide is inflammatory disease e.g. Albheimer's disease, carcinovascular disease e.g. Albheimer's disease, compound is disease, carcinovascular disease e.g. Albheimer's disease, compound disease, e.g. pulmonary Mpertension, bronchial asthmany gastrointestinal disorders e.g. pulmonary Mpertension, bronchial preclampsia, carcinogenesis. The present sequence represents a contained in electronic formant directly from USPTO at this patent did not form part of the printed appectation but was obtained in electronic formant directly from USPTO at sequence data for the contained in electronic format directly from USPTO at sequence and the contained and not form part of the printed appectation but was obtained in electronic format directly from USPTO at Sequence 1685 BP; 484 A; 435 C; 387 G; 379 T; 0 U; 0 Other;

```
ò
                    임
                                            à
                                                                 셤
                                                                                        à
                                                                                                              g
                                                                                                                                   ò
                                                                                                                                                          a
                                                                                                  61 CGCAGCCGGAGCCAGCAGAGCCGGAAAGCCGCCCCGGGCAGAAAAGCCGAGCAGAGCT 120
                                                                                                                          120
                                                                                                                                               121 GGGTGGCGTCTCCGGGCCGCCGCTCCGACGGGCCAGCGCCCTCCCCATGTCCCTGCTCCC
                                                                                                                                                           9
                                                                      61 CGCAGCCAGAGCCAGCAGAGCCGGAAAGCCCCCGGGCAAAAGCCGAAGCAAGCT
                                                       1 GCGGAGACAAGCGCAGAGCGCAGGCCACAGACAGCCCTGGGCATCCACCGACGG
                                   Gaps
                                  .
0
           100.0%; Score 1685; DB 7; Length 1685; 100.0%; Pred. No. 0; Anismatches 0; Indels 0;
        Ouery Match
Best Local Similarity 100.0
Matches 1685; Conservative
                                                                            g
                                                                                                  ò
                                                                                                                   g
                                                                                                                                                                    g
                                                                                                                                             ે
```

```
1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      961 AGCTGCCACGGGCTCTCCTGGGCTTATGGCCGGTCACAGCCTCAGTGTGACTCCACAGTG 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        961 AGCIGCCACGGGCTCTCCTGGGGCTTATGGCCGGTCACAGCCTCAGTGTGACTCCACAGG 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1021 GCCCCTGTAGCCGGGCAAGCAGGAGCAGGTCTCTGCATCTGTTCTCTGAGGAACTCAA 1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1201 TCCCAACCTGAGGATTTCTGAAAGGTTCACAGGTTCAATATTTAATGCTTCAGAAGCATG 1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1201 TCCCAACCTGAGGATTTCTGAAAGGTTCACAGGTTCAATATTTAATGCTTCAGAAGGCATG 1260
                                                                                                                                                                                                                           420
                                                                                                                                                                                                                                                                                                                                540
                                                                                     300
                                                                                                                        360
                                                                                                                                                        360
                                                                                                                                                                                          420
                                                                                                                                                                                                                                                             480
                                                                                                                                                                                                                                                                                            480
                                                                                                                                                                                                                                                                                                                                                               540
                                                                                                                                                                                                                                                                                                                                                                                                 600
                                                                                                                                                                                                                                                                                                                                                                                                                                    600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 900
                                                                                                                                                                                                              361 GAAGATGGTTATCATCATCACCACCAAGAGCGTGTCCAGGTACCGAGGTCAGGAGCACTGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                         661 AGCACTITITACCAACGGTCAGTTTTTACATTTTATAGCTGCGTGCGAAAGGCTTCCAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             841 TACATCTGAGCTTTTATAAGCGCCCGGGAGGAACAATGAGCTTGGTGGACACATTTCATTG
                    301 GATCCGCTACAGCGACGTGAAGAAGCTGGAAATGAAGCCAAAAGTACCCGCACTGCGAGA
                                                                                                                                                                                                                                                                                                                              481 GCGCAGGGTCTACGAAGAATAGGGTGAAAAACCTCAGAAGGGAAAACTCCAAACCAGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGGGAGACCCATCTCTCTTGTGCTCCAGACTTCATCACAGGCTGCTTTTTATCAAAAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              721 TGGGAGACCCATCTCTCTTGTGCTCCAGACTTCATCAGGGGGGCTGCTTTTTATCAAAAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   901 CAGTGTTGCTCCATTCCTAGCTTGGGAAGCTTCCGCTTAGAGGTCCTGGCGCCTCGGCAC
                                                                                     241 Gecerteracaccecereresaccesrccaaarccaagerccegaagesccaa
                                                                                                                                             301 GATCCGCTACAGCGACGTGAAAGCTGGAAATGAAGCCAAAGTACCCGCACTGCGAGGA
                                                                                                                                                                                                                                                           421 GCACCCCAAGCTGCAGAGCACCCAAGCGCTTCATCAAGTGGTACAACGCCTGGAAACGAGAA
                                                                                                                                                                                                                                                                                 421 GCACCCCAAGCTGCAGAGCACCAAGCGCTTCATCAAGTGGTACAAGCCTGGAAA
                                                                                                                                                                                                                                                                                                                                                           481 GCGCAGGGTCTACGAAGAATAGGGTCAAAAACCTCAGAAGGGAAAACTCCAAAACAAGTTG
                                                                                                                                                                                                                                                                                                                                                                                                 781 GGAAAACTCATGCCTTTCCTTTTTAAAAAATGCTTTTTTGTATTTGTCCATACGTCACTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TACATCTGAGCTTTATAAGCGCCCGGGAGGAACAATGAGCTTGGTGGACACATTTCATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         901 CAGIGITICATICCATICCTAGCITIGGAAGCTICCGCTTAGAGGTCCTGGCGCCTCGGCAC
                                                                                                                                                                                           GAAGATGGTTATCATCACCACCAAGAGCGTGTCCAGGTACCGAGGTCAGGAGCACTGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     601 AAAAAAAAAAAGCCTTTCTTTCTCACAGGCATAAGACACAAATTATATATTGTTATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCCCCTGTAGCCGGGCAAGCAGGAGCAGGTCTCTCTGCATCTGTTCTCTGAGGAACTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGAGGTTCCCAACACTGTCAGCAAAAACCTTAGGAGAAAACTTAAAAATATATGAATACA
                                                       GECECTETACACCECECETGEACEGETCCAAATGCAAGTECTCCCGGAAGGGACCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1081 GringGrigccaGaAAAAGrGcricArrccccccricGriAArrrraCACACCCTAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1141 AACATTTCCAAGATCCTGTGATGGCGAGACAAATGATCCTTAAAGAAGGTGTGGGGTCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1141 AACATTTCCAAGATCCTGTGATGGCGAGACAAATGATCCTTAAAGAAGGTGTGGGGTCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GITIGGITGCCAGAAAAIGTGCTTCATTCCCCCCTGGTTAATTTTTACACACCCTAGGA
361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1081
                                                                                 ద
                                                                                                                                                    a
                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                          à
                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                             d
                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
```

```
98US-0079294P.
98US-0079265P.
98US-0079664P.
98US-0079664P.
98US-0079664P.
98US-007968P.
98US-007968P.
98US-007978P.
98US-007978P.
98US-007978P.
98US-007978P.
98US-007978P.
98US-007978P.
98US-007978P.
98US-007978P.
98US-007978P.
98US-007923P.
98US-007923P.
98US-007923P.
98US-007923P.
98US-007923P.
98US-007923P.
98US-00187141.
 25-MAR-1998;
25-MAR-1998;
27-MAR-1998;
27-MAR-1998;
27-MAR-1998;
27-MAR-1998;
27-MAR-1998;
27-MAR-1998;
27-MAR-1998;
27-MAR-1998;
26-JUN-1998;
26-JUN-1998;
26-JUN-1998;
26-JUN-1999;
26-JUN-1999;
26-JUN-1999;
26-JUN-1999;
26-JUN-1999;
26-JUN-1999;
26-JUN-1999;
26-JUN-1999;
26-JUN-1999;
26-JUN-2000;
27-MAR-2000;
28-MAR-2000;
29-MAR-2000;
20-MAR-2000;
20-MAR-2000;
20-MAR-2000;
20-MAR-2000;
21-MAR-2000;
21-MAR-2000;
22-MAR-2000;
22-MAR-2001;
22-MAR-2001;
22-MAR-2001;
22-MAR-2001;
22-MAR-2001;
22-MAR-2001;
21-MAR-2001;
22-MAR-2001;
22-MAR-2001;
21-MAR-2001;
22-MAR-2001;
21-MAR-2001;
22-MAR-2001;
22-MAR-2001;
21-MAR-2001;
22-MAR-2001;
22-MAR-2001;
21-MAR-2001;
22-MAR-2001;
23-MAR-2001;
23-MA
  TTTCCTCTGTACATATACCCTTAAGAACGCCCCCTCCACACACTGCCCCCCAGTATATGC 1560
                                                                                                                                                                                                                                                               1380
                                                                          1440
                                                                                                1440
                                                                                                                     1261 TGAGGTTCCCAACACTGTCAGCAAAACCTTAGGAGAAAACTTAAAAATATATGAATACA 1320
                                                                                                                                                                                                                                TICTTTCCCTCACCACAACAGCAACATACTAAAGCAATATATTTGTGATTCCCCAT
                                                                          TTCTTTCCCTCACACACAGAACATGCAGTACTAAAGCAATATATTTGTGATTCCCCAT
                             TGCGCAATACACAGCTACAGACACACTTCTGTTGACAAGGGAAAACCTTCAAAGCATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; PRO polypeptide; secreted and transmembrane protein; immune disorder; diabetes; hyper-insulinaemia; hypo-insulinaemia; cardiac insulficiency; nervous system disorder; kidney disorder; bone disorder; carthritis; tumour; wound healing; genetic disorder; cytostatic; antidiabetic; antiinflammatory; antiarthritic; anti-tumour; vulnerary; antianaemic; dermatological; cardiant; gene; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CDNA encoding human PRO273 polypeptide
                                                                                                                                                                                                                                                                                                                                                                                                  BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       81US-00267213.
97US-0062260P.
97US-00653119.
97US-006534P.
98US-0077632P.
98US-0077641P.
98US-0077641P.
98US-0077641P.
98US-007891P.
98US-007891P.
98US-007891P.
                                                                                                                                                                                                                                                                                                                                                                                                   ABX92577 standard; cDNA; 1685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16-OCT-2001; 2001US-00978697
                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                AAAAA 1685
                                                                                                                                                                                                                                                                                                                                         AAAAA 1685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US2002169284-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       26-MAY-1981,
17-OCT-1997,
13-NOV-1997,
13-NOV-1997,
10-MAR-1998,
11-MAR-1998,
11-MAR-1998,
11-MAR-1998,
11-MAR-1998,
11-MAR-1998,
12-MAR-1998,
20-MAR-1998,
20-MAR-1998,
20-MAR-1998,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                   08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            14-NOV-2002
                                                                                                                                                                                                                                                                                                                                         1681
                                                                                                                                                                                                                                             1561
                                                                                                                                                                                                                                                                                            1621
                                                                                                                                                                                                                                                                                                                    1681
                                                     1321
                                                                                                  1381
                                                                                                                           1441
                                                                                                                                                                        1501
                                                                                                                                                                                              1501
                                                                                                                                                                                                                      1561
                                                                                                                                                                                                                                                                     1621
                              1321
                                                                           1381
                                                                                                                                                 1441
                                                                                                                                                                                                                                                                                                                                                                                                                         ABX92577
                                                                                                                                                                                                                                                                                                                                                                             RESULT 9
ABX92577
                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                          d
                                                                                                                                                                                                                      8 8
                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                               š
                             ò
                                                 ద
                                                                    ઠે
                                                                                                                         8 6
                                                                                                                                                                      ò
```

Ashkenazi A, Baker KP, Botstein D, Desnoyers L, Eaton D;
Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME;
Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ;
Kljavin IJ, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton
Stewart TA, Tumas D, Williams PM, Wood WI;

ΩĽ,

WPI; 2003-288163/28. P-PSDB; ABU61125.

Novel secreted and transmembrane polypeptides and polynucleotides encoding them useful for treating cancer, kidney diseases, bone, cartilage disorders and immune deficiencies.

Claim 2; Fig 148; 459pp; English

The present invention relates to the isolation of novel human PRO polypeptides, and the polynucleotide sequences encoding them. The PRO polypeptides are secreted and transmembrane proteins. The PRO polypeptides are secreted and transmembrane proteins. The PRO polypeptides are secreted and transmembrane proteins. The PRO polypeptides are useful for detecting other PRO polypeptides, for inking bioactive molecules to cells expressing PRO polypeptides, for modulating conting agonists or antagonists. The bioactive molecule maybe a toxin, radiolabel or antibody, and causes apoptosis or death of the cell. The PRO polypeptides are useful for treating immune disorders, diabetes or hyper- or hypo-insulinaemia, cardiac insulficiency, nervous system disorders, kidney disorders, bone and cartilage disorders or arthritis, tumours, and wound healing. The polymucleotide sequences encoding PRO polypeptides are useful as hybridisation probes, in chromosome and gene conting propertides, for the generation of antisense RNA and DNA, in the preparation of antisense RNA and and plant, in the preparation of antisense RNA and plant, in the preparation of antisense RNA and plant, and genetic disorders, and minals, for the generic analysis of individuals with genetic disorders, and minals directly from the USPTO web site at the invention. Note: The sequence encodes a human PRO polypeptide sequence data for this patent was obtained in continue to the directly from the USPTO web site at 

Sequence 1685 BP; 484 A; 435 C; 387 G; 379 T; 0 U; 0 Other;

ô 240 120 180 180 240 300 300 360 360 420 420 480 120 9 GATCCGCTACAGCGACGTGAAGAAGCTGGAAATGAAGCCAAAGTACCCGCACTGCGAGGA GGCGCTGTACACCGCGCGTGTGCACGGGTCCAAATGCAAGTGCTCCCGGAAGGGACCCAA GATCCGCTACAGCGACGTGAAGAAGCTGGAAATGAAGCCAAAAGTACCCGCACTGCGAGGA GAAGATGTTATCATCACCACCACCAGGGGTGTCCAGGTACCGAGGTCAGGAGCACTGCCT GCACCCCAAGCTGCAGAGCACCAAGCGCTTCAACTGGTACAACGCCTGGAACGAGAA CGCAGCCGGAGCCAGCAGAGCCGGAAGCCCCGGGCAGAGAAAGCCGAGCAGAGCT GAAGATGGTTATCATCACCACCAAGGGGTGTCCAGGTACCGAGGTCAGGAGCACTGCCT GCGGAGACAAGCGCAGCGCAGCGCACGGCCACAGACAGCCCTGGGGCATCCACGACGG GCGGAGACACGCAGAGCGCAGCGCACGGCCACAGACACCCTGGGCATCCACCGACG GGGTGGCGTCTCCGGGCCGCTCCGACGGGCCAAGCGCCCTCCCCATGTCCCTTGTCCCT . 0 Query Match
Best Local Similarity 100.0%; Score 1685; DB 7; Length 1685;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 1685; Conservative 0; Mismatches 0; Indels 0; 181 301 361 Н Н 61 121 181 241 241 301 421

8 8 8

g S

g

1320 1020 1020 1140 840 900 960 960 099 999 720 720 780 780 840 900 480 600 9 TTTCCTCTGTACATATACCCTTAAGAACGCCCCCTCCACACACTGCCCCCCAGTATATGC TGAGGTTCCCAACACTGTCAGCAAAAACCTTAGGAGAAAACTTAAAAATATATGAATACA GTAATTCTTCAATGTTAAACAGTGCAGTCCTTTTCGAAAGCTAAGATGACCATGCGCCC GCACCCCAAGCTGCAGAGCACCAACGCGCTTCATCAAGTGGTACAACGCCTGGAACGAAAA TGGGAGACCCATCTCTCTTGTGCTCCAGACTTCATCACAGGCTGCTTTTTTATCAAAAGG AGCTGCCACGGGCTCTCCTGGGCTTATGGCCGGTCACAGCCTCAGTGTGACTCCACAGTG AGCTGCCACGGGCTCTCCTGGGCTTATGGCCGGTCACAGCCTCAGTGTGACTCCCACAGG 1081 GTTIGGTTGCCAGAAAAATGTGCCTTCATTCCCCCCTGGTTAATTTTTACACACCCTAGGA 1141 AACATTTCCAAGATCCTGTGATGGTGGGGGGGAGACAAATGATCCTTAAAGAAGGTGTGGGGGTCTT TCCCAACCTGAGGATTTCTGAAAGGTTCACAGGTTCAATATTTAATGCTTCAGAAGCATG TCCCAACCTGAGGATTTCTGAAAGGTTCACAGGTTCAATATTTAATGCTTCAGAAGCATG TGCGCAATACACAGCTACAGACACATTCTGTTGACAAGGGAAAACCTTCAAAGCATGT TICTITICCCTCACCACACAGAACAIGCAGTACTAAAAGCAATATATTTGTGATTTCCCCAT GTAATTCTTCAATGTTAAACAGTGCAGTCCTCTTTCGAAAGCTAAGATGACCATGCGCCC AGCACTITITACCAACGGTCAGTTTTTACATTTTATAGCTGCGTGCGAAAGGCTTCCAGA TGGGAGACCCCATCTCTCTTGTGCTCCAGACTTCATCACAGGCTGCTTTTTATCAAAAAGG TACATCTGAGCTTTTATAAGCGCCCGGGAGGAACAATGAGCTTGGTGGACACATTTCATTG CAGTGTTGCTCCATTCCTAGCTTGGGAAGCTTCCGCTTAGAGGTCCTGGCCCCTCGGCAAC GITIGGITGCCAGAAAAIGTGCITCAITCCCCCCTGGITAAITTTTACACACCCTAGGA GCGCAGGGTCTACGAAGAATAGGGTGAAAAACCTCAGAAGGGAAAAACTCCAAAACCAGTTG 1141 AACATTTCCAAGATCCTGTGATGGCGAGACAAATGATCCTTAAAGAAGGTGTGTGGGGTCTT 841 196 196 1201 1201 1261 1261 1321 1321 1381 1381 1441 1441 1501 1081 1021 661 721 841 901 901 1021 481 541 601 661 721 8 g g dd 셤 8 g ð Вb ò 셤 8 6 à d 8 g 8 8 8 셤 ઠે a g ò g  $\dot{\circ}$ 셤 õ 8 6 à ď à  $\dot{\delta}$ 

```
New genes and secreted and transmembrane polypeptides (e.g. PRO337 or PRO1559), useful for treating or diagnosing e.g. cancers, atherosclerosis, infertility, stroke, encephalitis, hepatitis or multiple sclerosis in mammals.
Human; ss; gene; secreted protein; transmembrane protein; PRO; malignancy; cancer; ovarian cancer; colorectal cancer; sarcoma; leukaemia; lymphoma; inflammatory disease; necrosis; atherosclerosis; infertility; premature apply; psoriasis; inflammatory disease; renal disease; arthritis; immune-mediated alopecia; stroke; encephalitis; hepatitis; multiple sclerosis; gene therapy.
                         1501 TTTCCTCTGTACATATACCCTTAAGAACGCCCCCTCCACACACTGCCCCCCCAGTATATGC
                                                                                                                                                                                                                                                                                                                              Human cDNA encoding secreted/transmembrane protein PRO273,
                                                                                                                                                                                                                                           ACA66318 standard; cDNA; 1685 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      97US-0064249P
97US-0066341P
97US-0066341P
98US-0077432P
98US-0077643P
98US-0077641P
98US-0077641P
98US-0077641P
98US-0077641P
98US-0077641P
98US-0077641P
98US-0077641P
98US-0077664P
98US-0077664P
98US-0077664P
98US-0079204P
98US-0079204P
98US-0079204P
98US-0079204P
98US-007921P
98US-007921P
98US-007921P
98US-007921P
98US-007921P
98US-007921P
98US-007928P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                15-OCT-2001; 2001US-00978189
                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                          AAAAA 1685
                                                                                                                                                                     1681 AAAAA 1685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US2003004102-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17-OCT-1997;
13-NOV-1997;
11-NAR-1998;
11-MAR-1998;
11-MAR-1998;
11-MAR-1998;
12-MAR-1998;
12-MAR-1998;
12-MAR-1998;
20-MAR-1998;
20-MAR-1998;
20-MAR-1998;
20-MAR-1998;
20-MAR-1998;
20-MAR-1998;
21-MAR-1998;
22-MAR-1998;
23-MAR-1998;
24-MAR-1998;
26-MAR-1998;
27-MAR-1998;
27-MA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              07-DEC-1998;
22-DEC-1998;
05-JAN-1999;
                                                                                                                                                                                                                                                                                                    24-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   02-JAN-2003
                                                      1561
                                                                                                                                          1681
                           1561
                                                                                                                                                                                                                                                                        ACA66318;
                                                                                                                                                                                                              RESULT 10
                                                                                                                                                                                                                               ACA66318
                                                                                                                                                                                                                                                           음 &
                                                g
                                                                                ò
                                                                                                             셤
                                                                                                                                     ò
                                                                                                                                                               g
```

```
Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL; Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME; Goddard A, Goddwski PJ, Grimaldi JC, Gurney AL, Hillan KJ; Kljavin IJ, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton Stewart TA, Tumas D, Williams PM, Wood WI;
05-MAR-1999; 99US-00254465.
06-MAR-1999; 99WG-00205028.
10-MAR-1999; 99WG-00205028.
112-MAR-1999; 99WG-00205190.
12-MAR-1999; 99WG-00205191.
12-MAR-1999; 99WG-00205191.
13-MAR-1999; 99WG-00205191.
14-MAY-1999; 99WG-00205191.
12-MAR-1999; 99WG-00205191.
12-MAR-1999; 99WG-00205191.
12-MAR-1999; 99WG-00205191.
13-MAR-1999; 99WG-0030118.
14-MAY-1999; 99WG-0030118.
15-MAR-2000; 99WG-0030113.
15-MAR-2000; 200WG-003012.
16-DEC-1999; 99WG-003012.
16-DEC-1999; 99WG-003013.
17-MAR-2000; 2000WG-003014.
17-MAR-2000; 2000WG-003014.
17-MAR-2000; 2000WG-003014.
17-MAR-2001; 2000WG-003013.
17-MAR-2001; 2000WG-003013.
18-DEC-2000; 2000WG-003013.
18-DEC-2000; 2000WG-003013.
19-MAR-2001; 2000WG-003013.
10-MAY-2001; 2000WG-003013.
10-MAY-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (GETH ) GENENTECH INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2003-341189/32.
P-PSDB; ABU80394.
```

DIT;

Claim 2; Fig 148; 460pp; English

The invention relates to a new isolated nucleic acid molecule comprises a sequence with at least 80% identity to: (a) a nucleotide encoding any of sequence with at least 80% identity to: (a) a nucleotide encoding any of sequence with at least 80% sequences the full length coding sequences fully defined in the specification; or the full length coding sequence of any these 94 concleotide sequences. Also included are an isolated PRO polypeptide for nucleotide sequences cited above (or an isolated PRO polypeptide sequence acid sequence identity to: (a) an amino acid sequence code by the nucleotide deposited with ATCC numbers listed in the specification; (b) the PRO polypeptide, lacking its associated signal peptide), a vector comprising the nucleotide sequence and an anti-PRO polypeptide, with or acting a sequence and sequence and an anti-PRO polypeptide, with or code peptide; a host cell comprising the vector (and producing a PRO polypeptide), a chimaeric molecule comprising the PRO polypeptide, with or a heterologous amino acid sequence and an anti-PRO antibody. The PRO polypeptides or polymologicides are useful as pharmaceuticals, or colorectal cancer, sarcoma, leukaemia or lymphoma, inflammatory disease, colorectal cancer, sarcoma, leukaemia or lymphoma, inflammatory disease, renal disease, arthritis immune-mediated alopecia, stronged are useful as pharmaceutically as targets of correctal cancer, sarcoma, leukaemia or lymphoma, inflammatory disease, renal disease, arthritis, immune-mediated alopecia, stronged and languages are useful as molecular and screening, particularly as targets of the presence of these diseases; and in the diagnostic determination of the presence of these diseases; and in the diagnostic conscreening libraries of human cDMA, genomic DMA or PRO polypeptides are useful as molecular weight and provession and secretic DMA or properties are useful as molecular provession and in gene therapy, genomic DMA or PRO polypeptides are useful as molecular sequence of these are provession and sequence o  $\begin{array}{l} \mathbf{x} \\ \mathbf$ 

Sequence 1685 BP; 484 A; 435 C; 387 G; 379 T; 0 U; 0 Other;

ó 180 180 240 240 360 360 420 420 480 480 GGCCCTGTACACCGCGCGTGTGGACGGGTCCAAATGCAAGTGCTCCCGGAAGGGACCCAA 300 300 120 9 241 GGCGCTGTACACCGCGCGCGTGTGGACGGGTCCAAATGCAAGTGCTCCCGGAAGGGACCCAA GCACCCCAAGCTGCAGAGCACCAAGCGCTTCATCAAGTGGTACAACGCCTGGAACGAGAA GCACCCCAAGCTGCAGAGCACCAAGCGCTTCATCAAGTGGTACAACGCCTGGAACGAAA GATCCGCTACAGCGACGTGAAGAAGCTGGAAATGAAGCCAAAAGTACCCGCACTGCGAGGA GAAGATGGITATCATCACCACCAAGAGGGTGTCCAGGTACCGAGGGTCAGGAGCACTGCCT 61 CGCAGCCGGAGCCAGCAGAGCCGGAAGGCGCCCCGGGCAGAGAAAGCCGAGCAAGACT 121 gagragograncogagogagogacracogacagocaagogocaracocararocoracoraco GCGGAGACAAGCGCAGAGCGCACACGGCCACAGACAGCCCTGGGCATCCACCGACGG Gaps ô ery Match 100.0%; Score 1685; DB 7; Length 1685; St Local Similarity 100.0%; Pred. No. 0; tches 1685; Conservative 0; Mismatches 0; Indels 0; 361 121 181 181 241 301 361 421 61 301 Query Match 8 6 요상 8 5 6 8 6 8 6 8 6  $\overset{\circ}{\circ}$ 

1020 1260 1320 1380 960 600 600 99 099 720 720 780 840 840 900 900 TICTITICCCTCACCACAACAACATGCAGTACTAAAGCAATATATTTGTGATTCCCCAT GIAATICIICAAIGIIAAACAGIGCAGICCCCIIITCAAAAGCIAAAAAACACAIGCGCC CGCATTGTACTGCTGTTATATGCTATGTACATGTCAGAAACCATTAGCATGCAA TITCCICTGTACAINIACCCTTAAGAACGCCCCTCCACACACTGCCCCCCAGTATATGC GITTGGITGCCAGAAAAATGTGCTTCATTCCCCCCTGGITAATTTTACACACCCTAGGA TCCCAACCTGAGGATTTCTGAAAGGTTCACAGGTTCAATATTTAATGCTTCAGAAGCATG TCCCAACCTGAGGATTTCTGAAAGGTTCACAGGTTCAATATTTAATGCTTCAGAAGCATG TGGGAGACCCATCTCTCTTGTGCTCCAGACTTCATCACAGGCTGCTTTTTATCAAAAAGG TGGGAGACCCATCTCTCTTGTGCTCCAGACTTCATCACAGGCTGCTTTTTATCAAAAAGG TACATCTGAGGTTTATAAGCGCCCGGGAGGAACAATGAGCTTGGTGGACACATTTCATTG CAGTGTTGCTTCCATTCCTAGCTTGGGAAGCTTCCGCTTAGAGGTCCTGGCGCCTCGGCAC AGCTGCCACGGGCTCTCCTGGGCTTATGGCCGGTCACAGCCTCAGTGTGACTCCACAGTG GCCCCTGTAGCCGGGCAAGCAGGAGCAGGTCTCTCTGTCTTTCTCTGAGGAACTCAA GITIGGITIGCCAGAAAATGIGCITICATICCCCCCTGGITAATTTTTACACACCCTAGGA AACATTTCCAAGATCCTGTGATGGCGAGACAAATGATCCTTAAAAGAAGGTGTGGGGGTCTT TGAGGTTCCCAACACTGTCAGCAAAAACCTTAGGAGAAAAACTTAAAAATATATGAATACA TGCGCAATACACAGCTACAGACACATTCTGTTGACAAGGGAAAACCTTCAAAGCATGT AGCACTITITIACCAACGGTCAGTTTTTACATTTTATAGCTGCGTGCGAAAGGTTTCAAA GGAAAACTCATGCCTTTCCTTTTAAAAATGCTTTTTTGTATTTGTCATACGTCACTA AAAAAAAAAAAAAGCTTTCTTCTCACAGGCATAAGACACAAATTATATATTGTTATGA 481 GCGCAGGGTCTACGAAGAATAGGGTGAAAAACCTCAGAAGGAAAACTCCAAACAGAATTG 1441 1081 1141 1201 1261 1321 1381 1381 1441 1501 1201 1261 1321 1501 841 961 1021 1081 601 661 721 721 781 901 541 541 601 661 481 \$ 8 \$ 원 장 임 \$ A ò DP 장염 P ö පු 셤 \$ B \$ g ò g ò

```
28-APR-1999
    1621 GGTTTCATATCTTTCTAAGAIGGAAAGTAATAAAATAATATTTGAAATGTAAAAAAA 1680
                                                                                                                                                                                   Human; secreted and transmembrane protein; PRO; gene; ss; tissue typing; chromosome identification; vaccine; cancer; retinal disorder; sports-related joint disorder; osteoarthritis; rheumatoid arthritis; wound healing; obesity; diabetes; hearing loss; cardiac insufficiency disorder; kidney disorder; nervous system disorder; haemoglobin associated disorder.
                                                                                                                                                                     Novel human secreted and transmembrane protein PRO273 cDNA.
                                                                                                                    ADA24908 standard; cDNA; 1685 BP.
                                                                                                                                                                                                                                                                                                               970S-0062250P
970S-0064249P
970S-006364P
980S-0077632P
980S-0077641P
980S-0077641P
980S-0077641P
980S-007866P
980S-0078886P
980S-0078936P
980S-0078936P
980S-0078936P
980S-0078936P
980S-0079656P
980S-0080107P
980S-0080107P
980S-0080134P
980S-0080134P
980S-0080134P
980S-0080134P
980S-0080134P
980S-0080134P
980S-0080134P
                                                                                                                                                                                                                                                                                               16-OCT-2001; 2001US-00978564
                                                                                                                                                   20-NOV-2003 (first entry)
                                                          1681 AAAAA 1685
                                                                          1681 AAAAA 1685
                                                                                                                                                                                                                                                              US2003050241-A1.
                                                                                                                                                                                                                                                Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                       13- WAR-1998;
20-WAR-1998;
20-WAR-1998;
20-WAR-1998;
25-MAR-1998;
27-WAR-1998;
27-WAR-1998;
27-WAR-1998;
30-WAR-1998;
31-WAR-1998;
                                                                                                                                                                                                                                                                                13-MAR-2003
                                                                                                                                    ADA24908;
                                                                                                  ò
                                       ద
                                                                       ПP
                                                      \dot{\delta}
```

```
9805-00818179

9805-00818199

9805-0081952P

9805-0081953P

9805-0081953P

9805-0081953P

9805-0081953P

9805-0081953P

9805-0091953P

9805-0091953P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        99WO-US000106.
99WO-US005028.
99WO-US005190.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         990S-0126773P.
990S-0130232P.
990S-0131022P.
990S-0131445P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               99US-0123957P
```

120 120 180

9 9 240 300 300 360 360 420 420 480 480 540

```
AGCTGCCACGGGCTCTCCTGGGCTTATGGCCGGTCACACCTCAGTGTGACTCCACAGTG 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCCCCTGTAGCCGGCCAAGCAGGAGCAGGTCTCTCTGCATCTGTTCTCTGAGGAACTCAA 1080
                                                                                                                                                                                                                                                                                                             241 GGCGCTGTACACCGCGCGTGTGGACGGGTCCAAATGCAAGTGCTCCCCGGAAGGGACCCAA
                                                                                                                                             121 GGGTGGCGTCTCCGGGCCCCCTCCGACGGGCCCAGCCCCCTCCCCATGTCCCTGCTCCC
                                                                                                                                                                                                                                                                                        GGGGTIGTACACCGGGGGTGTGGACGGGTCCAAATGCAAGTGCTCCCGGAAGGGACCCAA
                                                                                                                                                                                                                                                                                                                                                                                  GATCCGCTACAGCGACGTGAAGCTGGAAATGAAGCCAAAGTACCCGCACTGCGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGGGAGACCCATCTCTCTTGTGCTCCAGACTTCATCACAGGCTGCTTTTTATCAAAAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TACATCTGAGCTTTATAAGCGCCCCGGGAGGAACAATGAGACTTGGTGGACACATTTCATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAGTGTTGCTCCATTCCTAGCTTGGGAAGCTTCCGCTTAGAGGTCCTGGCGCCTCGGCAC
                          1 GCGGAGACAAGCGCAGAGCGCACGGCCACAGGCCACAGCCCTGGGCATCCACCGACGG
                                                                          CGCAGCCGGAGCCAGCAGAGCCGGAAGGCGCCCCCGGGCAGAGAAAGCCGAGCAGAGTT
                                                                                                   CECHGECCGGAGCCAGCAGAGCCGGAAGGCGCCCCCGGGCAGAAAGCCGAGCAGAGCT
                                                                                                                                                                              121 GGGTGGCGTCTCCGGCCGCCGCTCCGACGGCCAGCGCCCTCCCCATGTCCCTGCTCCC
                                                                                                                                                                                                                 Aceccececcececeacacareaecricereaececececececrecrecrecre
                                                                                                                                                                                                                                                                                                                                                           GATCCGCTACAGCGACGTGAAGAAGCTGGAAATGAAGCCAAAGTACCCGCACTGCGAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        421 GCACCCCAAGCTGCAGAGCACCAAGGGCTTCATCAAGTGGTACAAGGCCTGGAAACGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             661 AGCACITITIACCAACGGICAGITITIACAITITIATAGCIGCGIGCGAAAGGCITCCAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGGGAGACCCATCTCTTGTGCTCCAGACTTCATCACAGGCTGCTTTTTATCAAAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGAAAACTCATGCCTTTCCTTTTTAAAAAATGCTTTTTTGTATTTGTCCATACGTCACTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     781 GGAAAACTCATGCCTTTCTTAAAAAATGCTTTTTTGTATTTGTCCATACGTCACTA
       GCGGAGACAAGCGCAGAGCGCAGCGCACGGCCACAGACAGCCCTGGGCCATCCACCGACGG
                                                                                                                                                                                                                                                                                                                                                                                                                                GAAGATGGTTATCATCACCACCAGGGGGGGTCCAGGTACCGAGGTCAGGAGCACTGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                           361 GAAGATGGTTATCATCACCACCAGGGGTGTCCAGGTACCGAGGTCAGGAGCACTGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCACCCCAAGCTGCAGAGCACCAAGCGCTTCATCAAGTGGTACAACGCCTGGAACGAGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCGCAGGGTCTACGAAGAATAGGGTGAAAAACCTCAGAAGGGGAAAACTCCAAACCAGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAAAAAAAAAAAGCCTTTCTTTCTCACAGGCATAAGACACAAATTATATATTGTTATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TACATCTGAGCTTTATAAGCGCCCCGGGAGGAACAATGAGCTTGGTGGACACATTTCATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CAGTGTTGCTCCATTCCTAGCTTGGGAAGCTTCCGCTTAGAGGTCCTGGCGCCTCGGCAC
                                                                          61
                                                                                                           61
                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                      241
                                                                                                                                                                                                                                                                                                                                                           301
                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          901
                                                                                                                                          ò
                                                                                                                                                                          셤
                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                 ద
                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                         ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        qq
                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL;
Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME;
Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ;
Kljavin IJ, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL;
Stewart TA, Tumas D, Williams PM, Wood WI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New isolated PRO polypeptides for example extracellular, secreted and membrane bound proteins, useful for modulating the biological activities of cells and for treating, for example diabetes, cancer, rheumatoid arthritis, and hearing loss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention describes an isolated secreted and transmembrane (PRO) polypeptide (1). PRO337 polypeptide is useful for detecting PRO4993 polypeptide in a sample, and vice versa. PRO725, PRO706 and PRO799 are useful for detecting PRO159 polypeptide in a sample, and PRO1559 is useful for detecting PRO125, PRO700 and PRO39 in useful for inking a bioactive molecule to a cell expressing a PRO337 polypeptide, and PRO317 is useful for linking a bioactive molecule to a cell expressing a pro337 cell expressing a PRO4993 polypeptide. PRO4993 is useful for linking a bioactive molecule to a cell expressing a PRO739.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 8; Length 1685;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 100.0%; Score 1685; Best Local Similarity 100.0%; Pred. No. 0; Matches 1685; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 2; Fig 148; 461pp; English.
           02-UN-1999) 99US-01612222

23-UN-1999) 99US-0141037P-

07-UU-1999) 99US-0141037P-

26-UU-1999) 99US-0141659BP-

28-UU-1999) 99US-014569BP-

28-UU-1999) 99US-014569BP-

28-UU-1999) 99US-016256FP-

29-OCT-1999) 99US-016256FF-

16-DEC-1999) 99US-018028813.

02-DEC-1999) 99US-018028851.

02-DEC-1999) 99US-018028851.

03-DEC-1999) 99US-018028851.

05-DAN-2009, 99US-018030099.

30-DEC-1999) 99US-018030099.

30-DEC-1999) 99US-018030099.

11-FEB-2000, 2000WO-US000277.

06-JAN-2000, 2000WO-US000277.

06-JAN-2000, 2000WO-US001441.

24-FEB-2000, 2000WO-US001441.

02-MAR-2000, 2000WO-US01441.

02-MAR-2000, 2000WO-US01441.

02-MAR-2000, 2000WO-US01441.

02-MAR-2000, 2000WO-US01441.

02-MAR-2000, 2000WO-US018267.

24-AUG-2000, 2000WO-US018267.

25-MAR-2001, 2000WO-US018267.

25-MAR-2001, 2000WO-US018267.

25-MAR-2001, 2000WO-US018267.

25-MAR-2001, 2000WO-US018267.

25-MAR-2001, 2000WO-US018267.

25-MAR-2001, 2000WO-US01834956.

25-MAR-2001, 2000WO-US01834956.

25-MAR-2001, 2000WO-US01834956.

25-MAR-2001, 2000WO-US018385.

25-MAR-2001, 2000WO-US018385.

26-UUL-2001, 2000WO-US018585.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (GETH ) GENENTECH INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2003-521814/49.
P-PSDB; ADA24909.
```

540 900 999 099 720 780

780 840 840 900 900

720

GCCCCTGTAGCCGGGCAAGCAGGAGGTCTCTGTGATCTGTTCTCTGAGGAACTCAA 1080 GTTTGGTTGCCAGAAAATGTGCTTCATTCCCCCTGGTTAATTTTTACACACCCTAGGA 1140

1021 1081

임

ö

ö

Indels

960

g

ર્જ 셤 8 g જે

ઠે

```
9805-00774509-9805-00774509-9805-00774509-9805-00776432P-9805-00777643P-9805-00777643P-9805-0077643P-9805-0078986P-9805-0079939P-9805-0079923P-9805-0079923P-9805-0079923P-9805-0079923P-9805-0079923P-9805-0079923P-9805-0080337P-9805-0080337P-9805-0080337P-9805-0080337P-9805-0080337P-9805-0080337P-9805-0080337P-9805-0080337P-9805-0080337P-9805-0080337P-9805-0080337P-9805-0080337P-9805-0080337P-9805-0080337P-9805-0080337P-9805-0080337P-9805-0080337P-9805-0080337P-9805-0080337P-9805-0080337P-9805-0080337P-9805-0080337P-9805-0080337P-9805-0080337P-9805-008334P-9805-008334P-9805-008334P-9805-008334P-9805-008334P-9805-008334P-9805-008334P-9805-008334P-9805-008334P-9805-008334P-9805-008334P-9805-008333P-9805-008441P-9805-008441P-9805-008441P-9805-008441P-9805-008441P-9805-008441P-9805-008441P-9805-008441P-9805-008441P-9805-008441P-9805-008441P-9805-008441P-9805-008441P-9805-008441P-9805-0084433P-9805-0084433P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-0085338P-9805-008533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21-APR-1998;
22-APR-1998;
22-APR-1998;
22-APR-1998;
23-APR-1998;
23-APR-1998;
23-APR-1998;
29-APR-1998;
29-APR-1998;
29-APR-1998;
29-APR-1998;
29-APR-1998;
29-APR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          07-MAY-1998;
07-MAY-1998;
07-MAY-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       13-MAY-1998;
13-MAY-1998;
13-MAY-1998;
15-MAY-1998;
15-MAY-1998;
           10-MAR-1598

11-MAR-1598

11-MAR-1598

11-MAR-1598

12-MAR-1598

12-MAR-1598

20-MAR-1598

20-MAR-1598

20-MAR-1598

20-MAR-1598

27-MAR-1598

27-MAR-1598

27-MAR-1598

27-MAR-1598

27-MAR-1598

27-MAR-1598

27-MAR-1598

27-MAR-1598

21-MAR-1598

31-MAR-1598

31-MAR-1998

31-MAR-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     29-APR-1998;
29-APR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                07-MAY-1998;
1380
                                                                                                                                                                                                                                                                                                                         1440
                                                                                                                                                                                                                                                                                                                                                     TITCCICIGIACAIAIACCCTIAAGAACGCCCCTCCACACACACGCCCCCCAGIAIAIGC 1560
CTTTCCCTCACCACAACAGAACATGCAGTACTAAAGCAATATATTTGTGATTCCCCAT 1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human; secreted and transmembrane protein; PRO; cell death; neuropathy; peripheral neuropathy; diabetic peripheral neuropathy; AlDS-associated neuropathy; Charcot-Marie-Tooth disease; Refusum's disease; Abetallpoproteinaemia; Tangier disease; Krabbe's disease; Metachromatic leukodystrophy; Fabry's disease; Dejerine-Sottas syndrome; chromosome mapping; gene mapping; gene therapy;
                                                                                                                            TCCCAACCTGAGGATTTCTGAAAGGTTCACAGGTTCAATATTTAATGCTTCAGAAGCATG
                                                                                                                                                                  TGAGGTTCCCAACACTGTCAGCAAAACCTTAGGAAAAACTTAAAATATGAATACA
                                                                                                                                                                                                                             TGCGCAATACACACACACACATTCTGTTGACAAGGGAAAACCTTCAAAGCATGT
                                                                                                                                                                                                                                                    TTCTTTCCCTCACCACAACAGCAACATGCAGTACTAAAGCAATATATTTGTGATTCCCCAT
                                            AACATTTCCAAGATCCTGTGATGGCGAGACAAATGATCCTTAAAGAAGGTGTGGGGGTCTT
                                                                                                          TCCCAACCTGAGGATTTCTGAAAGGTTCACAGGTTCAATATTTAATGCTTCAGAAGCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Novel human secreted and transmembrane protein PRO273 cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACD29919 standard; cDNA; 1685 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             97US-0062250P.
97US-0064249P.
97US-0065311P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16-OCT-2001; 2001US-00978403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1681 AAAAA 1685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1681 AAAAA 1685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US2003050240-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17-OCT-1997;
03-NOV-1997;
13-NOV-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   08-SEP-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           gene; sa.
                                                                             1141
                                                                                                                                                                                                                                                                1321
                                                                                                                                                                                                                                                                                                                             1381
                                                                                                                                                                                                                                                                                                                                                                                                                         1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACD29919;
                                                                                                                                                                                                     1261
                                                                                                                                                                                                                                                                                                                                                            1441
                                                                                                                                                                                                                                                                                                                                                                                           1441
                   1081
                                                 1141
                                                                                                          1201
                                                                                                                                          1201
                                                                                                                                                                     1261
                                                                                                                                                                                                                                    1321
                                                                                                                                                                                                                                                                                                 1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 12
ACD29919
```

요

ਨੇ

g જે 엄 ò B ò g 8 a δ 15-MAY-1998 | 98US-0085580P | 15-MAY-1998 | 98US-0085582P | 15-MAY-1998 | 98US-008563P | 15-MAY-1998 | 98US-0086023P | 22-MAY-1998 | 98US-0086030P | 22-MAY-1998 | 98US-0086030P | 22-MAY-1998 | 98US-0086030P | 22-MAY-1999 | 98US-013023P | 22-MAY-1999 | 99US-013023P | 22-MAY-1999 | 99US-013022P | 22-MAY-1999 | 99US-013023P | 22-MAY-2000 | 2000MO-US01305SP | 22-MAY-2000 | 2000MO-US0133PS 15-MAY-1998;
15-MAY-1998;
15-MAY-1998;
15-MAY-1998;
15-MAY-1998;
22-MAY-1998;
22-MAY-1998;
22-MAY-1998;
22-MAY-1998;
22-MAY-1998;
23-MAY-1998;
24-MAY-1998;
25-MAY-1998;
25-MAY-1998;
26-UUN-1998;
26-UUN-1998;
27-MAY-1998;
28-MAY-1998;
28-MAY-1998;
28-MAY-1998;
28-MAY-1998;
30-MAY-1999;
30-MAR-1999;
30-MAR-2000;
21-FEB-2000;
22-MAY-2000;
23-MAY-2000;
23-MAT-2000;
23-MAY-2000;
23-MAY-2000;
23-MAY-2000;
23-MAY-2000;
23-MA 

The invention describes an isolated, secreted and transmembrane polypeptide, termed PRO polypeptide (I). (I) is useful for detecting PRO4993, PRO437, PRO599, PRO779, PRO719 polypeptide, and for linking a bioactive molecule to a cell expressing the above polypeptides. The bioactive molecule is a toxin, radiolabel or an antibody and causes cell death. (I) is useful as therapeutic agent, in medical and industrial applications e.g. for treating neuropathy, especially peripheral neuropathy, diabetic peripheral neuropathy, AIDS-associated neuropathy, Charcot-Marie-Tooth disease, Refusum's disease, Abetalipoproteinaemia,

Novel secreted and transmembrane polypeptide for modulating biological activity of cell expressing the polypeptide, identifying agonists or antagonists of polypeptide, and as molecular weight markers.

WPI; 2003-503575/47. P-PSDB; ABO19696.

Claim 2; Fig 148; 459pp; English.

240

300 300 360 360 420 420

301 GATCCGCTACAGCGACGTGAAGCTGGAAATGAAGCCAAAGTACCCGGCACTGCGAGGA 301 GATCCGCTACAGCGACGTGAAGAAGAGCTGGAAATGAAGCCAAAGTACCCGCACTGCAAGGA

GGCGCTGTACACCGCGCGTGTGGACGGGTCCAAATGCAAGTGCTCCCGGAAGGGACCCAA

241

GAAGATGGTTATCATCACCACGAGGGGTGTCCAGGTACCGAGGACCAGGAGCACTGCCT 361 GAAGATGGTTATCATCACCACCAAGAGCGTGTCCAGGTACCGAGGTCAGGAGCACCTGCCT GCACCCCAAGCTGCAGGACCCAAGCGCTTCATCAAGTGGTACAACGCCTGGAACGAGAA 481 GCGCAGGGTCTACGAAGAATAGGGTGAAAAACCTCAGAAGGGAAAACTCCAAAACCTTG 

361

\$ B \$

421

9 6 9

120 120 180 180 240

9 9

Gaps 0; GCGGAGACAAGCGCAGAGCGCAGGGCACAGGCCACAGCCCTGGGCATCCACCGACGG GCGGAGACACAGGCGCAGAGCGCACGGCCACAGACAGCCCTGGGCATCCACCGACGG

Н

ò

g

19

ò

g à g ò

Query Match
100.0%; Score 1685; DB 8; Length 1685;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 1685; Conservative 0; Mismatches 0; Indels 0;

CGCAGCCGGAGCCAGCAGAGCCGGAGCGCCCCGGGCAGAAAGCCGAGCAGAGTT  GOG TO CONTROCTO 121 GGGTGGCGTCTCCGGGCCGCCCCCCCACGGCCAGCGCCCTCCCCATGTCCCTGCTCCTCCTCCTCCT 

121

480 480 540 540 600

601 AAAAAAAAAAAAGCCTTTCTTCTCACAGGCATAAGACACAAATTATATATTTTTTTGA 660

481 541

& 4

g &

8

DĽ;

Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL; Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gerritesn ME; Goddard A, Goddowski PJ, Grimaldi JC, Gurney AL, Hillan KJ; Kljavin IJ, Kuo SS, Napler MA, Pan J, Paoni NF, Roy MA, Shelton Stewart TA, Tumas D, Williams PM, Wood WL;

(GETH ) GENENTECH INC

10:40:00 2004

N

Mon Apr

601

g

ठ 셤 à d · &

 $\delta$ 

g

6 B 6

유 상 R

8 8

음성

```
| No. 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CGCATTGTACTGCTGTGTTATAIGCTAIGTACATGTCAGAAACCATTAGCATTGCATGCA 1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTTCCTCTGTACATATACCCTTAAGAACGCCCCTCCACACTGCCCCCCAGTATATGC 1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1261 TGAGGTTCCCAACACTGTCAGCAAAACCTTAGGAGAAAACTTAAAAATATATGAATACA 1320
1261 TGAGGTTCCCAACACTGTCAGCAAAAACCTTAGGAGAAAACTTAAAAATATATGAATACA 1320
                                                                                                                                                                                                                                                                                                                              CAGIGITGCTCCATTCCTAGCTTGGGAAGCTTCCGCTTAGAGGTCCTGGCGCCTCGGCAC 960
                                                                                                         TGGGAGACCCAICTCTCTTGTGCTCCAGACTTCATCACAGGCTGCTTTTTATCAAAAGG 780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TACATCTGAGCTTTATAAAGGGCCCGGGAAGAACAATGAGCTTGGTGGACACTTTCATTG
                                                                                                                                                                                                                                                                                                                                                       CAGIGITIGCTCCCATCCTAGCTTGGGAAGCTTCCGCTTAGAGGTCCTGGCGCCTCGGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGCGCAATACACAGCTACAGACACATTCTGTTGACAAGGGAAAACCTTCAAAGCATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTCTTTCCCTCACCACACACACATGCAGTACTAAAGCAATATATTTGTGATTCCCCAT
                                                                                                                                                                                                                                                       TACATCTGAGCTTTATAAGCGCCCGGGAGGAACAATGAGCTTGGTGGACACATTTCATTG
                                   AGCACTITITACCAACGGTCAGTTTTTACCATTTTATAGCTGCGTGCGAAAGGCTTCCAGA
                                                          AAAAA 1685
|||||
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1321
                                                                          661
                                                                                                             721
                                                                                                                                              721
                                                                                                                                                                                   781
                                                                                                                                                                                                                      781
                                                                                                                                                                                                                                                           841
                                                                                                                                                                                                                                                                                              841
                                                                                                                                                                                                                                                                                                                                    901
                                                                                                                                                                                                                                                                                                                                                                     901
                                       199
```

g

ò

원 장염

 $\dot{\delta}$ 

8 8 8

8 8 8

8 6 8 6

ò

```
ss; gene; inflammatory disease; organ failure; atherosclerosis; cancer; cardiac injury; infertility; birth defect; premature aging; AIDS; cancer; diabetic complication; tissue typing; human.
                                                                                                                                                                                                                                                                                                                                                                          Human cDNA encoding secreted/transmembrane polypeptide PRO273
                                                                                                                                                                      ВЪ
1681 AAAAA 1685
   셤
```

```
98US-0082804P.
98US-0083796P.
98US-0083322P.
98US-0083322P.
98US-0083322P.
98US-0083495P.
98US-0083495P.
98US-0083495P.
98US-0083445P.
98US-0083554P.
98US-0083534P.
98US-0083534P.
98US-0083534P.
98US-0083534P.
98US-0084643P.
98US-008588P.
98US-00858P.
         23. ARR. 11998;
29. ARR. 11998;
20. ARX. 11998;
30. ARX. 11998;
30. ARX. 11998;
30. ARX. 11998;
30. ARX. 11998;
31. MAX. 11998;
32. MAX. 11998;
33. ARX. 11998;
34. ARX. 11998;
35. ARX. 11998;
36. ARX. 11998;
37. ARX. 11998;
38. ARX. 11998;
38. ARX. 11998;
39. ARX. 11998;
39. ARX. 11998;
39. ARX. 11998;
30. ARX. 11998;
30. ARX. 11998;
30. ARX. 11998;
30. ARX. 11999;
31. ARX. 11999;
32. ARX. 11999;
33. ARX. 11999;
34. ARX. 11999;
35. ARX. 11999;
36. ARX. 11999;
36. ARX. 11999;
37. ARX. 11999;
38. ARX. 11999;
```

14-MAY-1999, 99W0-US010733.
02-UTN-1999, 99W0-US012252.
03-UTN-1999, 99W3-014037P.
03-UTL-1999, 99US-0141037P.
02-UTL-1999, 99US-0146228P.
03-UTL-1999, 99US-0180131.
03-UTL-1999, 99US-0180131.
03-UTL-1999, 99US-0180131.
03-UTL-1999, 99US-0180131.
03-UTL-1999, 99US-0180131.
03-UTL-1999, 99US-0180131.
04-UTN-2000, 2000WO-US001219.
05-UTL-2000, 2000WO-US001219.
05-UTL-2000, 2000WO-US001219.
05-UTL-2000, 2000WO-US001219.
05-UTL-2000, 2000WO-US001219.
05-UTL-2000, 2000WO-US001219.
06-UTN-2000, 2000WO-US001219.
07-WAY-2000, 2000WO-US001219.
08-UTL-2000, 2000WO-US001219.
09-UTL-2000, 2000WO-US001219.
09-UTL-2001, 2001WO-US00129.
01-UTN-2001, 2001WO-US0119.
03-UTN-2001, 2001WO-US0119.
03-UTN-2001, 2001WO-US0119.

ö

;

8; Length 1685; 0; Indels

Query Match
100.0%; Score 1685;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 1685; Conservative 0; Mismatches

Eaton DL; Gerritsen

Desnoyers L, I W, Gerber H, DB

Botstein D, Fong S, Gao

Ashkenazi AJ, Baker KP, Ferrara N, Filvaroff E, (GETH ) GENENTECH INC

120 120

61

61

염장

Н

8 8 8

121

GGGTGGCGTCTCCGGGCCGCCGCTCCGACGGGCCAGCGCCCTCCCCATGTCCCTGCTCCC

Page 25

Db 1201 TCCCAACCTGAGGATTTCTGAAAGGTTCACAGGTTCAATATTTAATGC Ov 1261 TGAGGTTCCCAACACTGTCAGCAAAAACTTAAAAA	1261 TGAGGTTCCCAACACTGT 1321 TGCGCAATACACAGGTAC	1321 1	1381	1 14 1	1501	1561		9 5	RESULT 14 ACD29334 LD ACD29334 standard; cDNA; 1685 BP.	AC ACD29334; XX XX 27-AUG-2003 (first entry)	Novel human secreted and transmembrane polypeptide cDNA (XX XX Human; secreted and transmembrane protein; PRO; viral in:	KW retinitis pigmentosum, age-related macular degeneration; KW sport-related joint problem; articular cartilage defect; KW rheumatorid arthritis; wound healing; obsetty; diabetes; kW richam discrete; meanial cell function; Berger diabetes.	KW cellac disease; dermatitis; Crohn disease; neuropathy; KW cardiac- insufficiency disorder; peripheral neuropathy; KW diabetic peripheral neuropathy; autonomic neuropathy; KW red. of the dastrointestinal tract;	(W) atony of the urinary bladder; post polio syndrome; Krabb (W) Charcot-Marie-Tooth disease; Fabry's disease; Tangier di (W) Refsum's disease; gene; ss.		PN US2003049633-A1. KX PD 13-MAR-2003.	16-OCT-2001; 2	PR 17-OCT-1997; 97US-0062250P. PR 03-NOV-1997; 97US-0064249P. PR 13-NOV-1997; 97US-0065311P. PD 27-1-NOV-1947; 97US-0066364P.	
·	ж <u>а</u> с	. д С	х д С			<u></u>			щ қ п /		· · · · · ·								
	181 AGGCGGCCCTCCGGTCAGCATGAGGTCCTGGCGGCGCCGCTGCTGCTGCTGCTGCTCTGCT 240	241 GGCGCTGTACACCGCGCGTGTGCACGGGTCCAAATGCAAGTGCTCCCGGAAGGGACCCAA 300 	301 GATCCGCTACAGCGACGTGAAGAAGCTGGAAATGAAGCCAAAGTACCCGCACTGCGAGGA 360 	361 GAAGATGGTTATCATCACCACCACCAGGTACCAGGTACCGAGGTCAGGAGCACTGCCT 420		. 481 GCGCAGGGTCTACGAAGAATAGGGTGAAAAACCTCAGAAGGGAAAACTCCAAACCAGTTG 540 	541 GGAGACTTGTGCABAGGACTTTGCAGATTAAAAAAAAAAA	601 AAAAAAAAAAGCCTTTCTTTCTCACAGGCATAAGACACAAATTATATTGTTATGA 660 	661 AGCACTITITACCAACGGTCAGTITITACAITTIATAGCTGCGTGCGAAAGGCTTCCAGA 720 	721 TGGGAGACCCATCTCTTGTGCTCCAGACTTCATCACGCTGCTTTTATCAAAAGG 780 	181   GGBABACTCATGCCTTTCTABABABTGCTTTTTTGTATTTGTCCATACGTCACTA   940	TACATCTGAGCTTTATAAGCGCCCGGGAGGAACA 	901 CAGIGITGCTCCATICCTAGCTTGGGAAGCTTCCGCTTAGAGGTCCTGGCGCCTCGGCAC 960	961 AGCTGCCACGGCTCTCCTGGGCTTATGGCCGGTCACAGCCTCAGTGTGACTCCACAGTG 1020 				1141 AACATTTCCAAGATCCTGTGATGGCGAGACAAATGATCCTTAAAGAAGGTGTGGGGGTCTT 1200 	1201 TCCCAACCTGAGGATTTCTGAAAGGTTCAGGTTCAATATTTAATGCTTCAGAAGGATG 1260
쥠	දු දු	è 8	දු පු	& A	\ \delta \ \frac{40}{10}	상 원	8 S	충 음	oy og	ζ d	કે ક	8 & 1	S q	\chi_{\text{q}}	8	අු (	ž f	Š 8	ò

ATGTAAAAAAAA 1680 |||||||||||| ATGTAAAAAAAA 1680 CCTTCAAAGCATGT 1380 ||||||||||||||| |CCTTCAAAGCATGT 1380 TTGTGATTCCCCAT 1440 ||||||||||||||| TTGTGATTCCCCAT 1440 CCCCCAGTATATGC 1560 TAGCATTGCATGCA 1620 |||||||||||||| TAGCATTGCATGCA 1620 AATATATGAATACA 1320 |||||||||||||||| |AATATATGAATACA 1320 IGCTICAGAAGCAIG 1260 on; ct; osteoarthritis; s; insulinaemia; ase; nephropathy; be's disease; lisease; Infection; 494.

```
PR 11-MAR-1996; 98US-0077641P.
PR 12-MAR-1996; 98US-0077649P.
PR 12-MAR-1996; 98US-0077041P.
PR 20-MAR-1996; 98US-0077041P.
PR 20-MAR-1996; 98US-0078936P.
PR 20-MAR-1996; 98US-0078936P.
PR 20-MAR-1996; 98US-0078936P.
PR 20-MAR-1996; 98US-0079804P.
PR 20-MAR-1996; 98US-0079804P.
PR 21-MAR-1996; 98US-0079663P.
PR 21-MAR-1996; 98US-0080134P.
PR 21-MAR-1996; 98US-0080134P.
PR 21-MAR-1996; 98US-0080134P.
PR 21-MAR-1996; 98US-008119P.
PR 21-MAR-1996; 98US-008136P.
PR 21-MAR-1996; 98US-0081361P.
PR 21-MAR-1996; 98US-0081361P.
PR 21-MAR-1996; 98US-008151P.
PR 21-MAR-
```

PR 15-MAY-1998; 98US-0085689P.
PR 15-MAY-1998; 98US-008569P.
PR 15-MAY-1998; 98US-00856029P.
PR 22-MAY-1998; 98US-00856029P.
PR 22-MAY-1998; 98US-0086430P.
PR 22-MAY-1998; 98US-0086431P.
PR 22-MAY-1998; 98US-0015413.
PR 22-MAY-1998; 98US-0015413.
PR 22-MAY-1998; 98US-0015418.
PR 22-MAY-1999; 99US-0013021.
PR 22-MAY-1999; 99US-0013021.
PR 23-MAY-1999; 99US-001302.
PR 23-MAY-199

```
1020
                                                                                                                                                                                                                                                    1320
                                                                                                                                                                                                                                                                  1320
                                                                                                                                                                                                                                                                                1380
                                                                                                                                                                                                                                                                                               1380
                                                                                                                                                                                                                                                                                                              1440
                                                                                                                                                                                                                                                                                                                                           1500
                                                                                                                                                                                                                                                                                                                                                        1500
                                                                                                                                                                                                                                                                                                                                                                       1560
                                                                                                                                                                                                                                                                                                                                                                                     1560
                                                                                                                                              1080
                                                                                                                                                                                          1200
                                                                                                                                                                                                        1200
                                                                                                                                                                                                                                                                                                                                                                                                                                               1680
                                                         900
                                                                      CAGIGITACTCCATICCTAGCITAGGAAGCTITCCGCTTAGAGGICCTGGCGCCTCGGCAC
                                                                                                   AGCTGCCACGGGCTCTCCTGGGCTTATGGCCGGTCACAGCCTCAGTGTGACTCCACAGTG
                                                                                                                                                                                         TACATCTGAGGTTTATAAGCGCCCGGGAGGAACAATGAGCTTGGTGGACACATTTCATTG
                                                                                                                               TCCCAACCTGAGGATTTCTGAAAGGTTCACAGGTTCAATATTTAATGCTTCAGAAGCATG
                                                                                                                                                                                                                                                                               TTCTTTCCCTGACGCACACGGACGTGCAGTACTAAAGCAATATATTTGTGATTCCCCAT
                                                                                                                                                            GGAAAACTCATGCCTTTCCTTTTTAAAAATGCTTTTTTGTATTTGTCCATACGTCACTA
TGGGAGACCCATCTCTTGTGCTCCAGACTTCATCACAGGCTGCTTTTTATCAAAAGG
              GGAAAACTGATGCCTTTCCTTTTAAAAATGCTTTTTTGTATTTGTCCATACGTCACTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CDNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   standard;
                                                                                                                                                                                                           1141
                                                                                                                                                                                                                                                                                                                1381
                                                                                                                                                                                                                                                                                                                                                                                                      1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1681
                                                                                                                     196
                                                                                                                                  1021
                                                                                                                                                1021
                                                                                                                                                                1081
                                                                                                                                                                             1081
                                                                                                                                                                                             1141
                                                                                                                                                                                                                         1201
                                                                                                                                                                                                                                        1201
                                                                                                                                                                                                                                                                                                                              1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADB73875
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADB73875
                               781
                                             841
                                                           841
                                                                          901
   721
                                                                                       901
                                                                                                      961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 15
ADB73875
ID ADB73
XX
AC ADB73
XX
                                                                                                                                                                                                                                                                              පි පි
                                                                                                                                                                                                                                                                                                                                                       d
                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                             8 & B
                                                                                                                                                                                        8 8 8
                                                                                                                                                                                                                                    8 8
                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                            B 5
                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                       음 중 음
                                                                                                   8 B 8
 8 B 8 B
                                                                                                                                                                                                                                 180
                                                                                                                                                                                                                                                180
                                                                                                                                                                                                                                                               240
                                                                                                                                                                                                                                                                           240
                                                                                                                                                                                                                                                                                           300
                                                                                                                                                                                                                                                                                                         300
                                                                                                                                                                                                                                                                                                                                      360
                                                                                                                                                                                                                                                                                                                                                     420
                                                                                                                                                                                                                                                                                                                                                                 420
                                                                                                                                                                                                                                                                                                                                                                                  480
                                                                                                                                                                                                                                                                                                                                                                                               480
                                                                                                                                                                                                                                                                                                                                                                                                              540
                                                                                                                                                                                                                                                                                                                                                                                                                                           009
                                                                                                                                                                                                                                                                                                                                                                                                                                                          600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   780
                                                                                                                                                                                                    120
                                                                                                                                                                                                                  120
                                                                                                                                                                                     9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TOGGAGACCCATCTCTCTGTGCTCCAGACTTCATCACAGGGCTGCTTTTTATCAAAAGG
                                                                                                                                                                                                    GGCGCTGTACACCGCGCGTGTCGACGGGTCCAAATGCAAGTGCTCCCGGAAGGGACCCAAAGGGACCCAAAGGGACCCCAAAGGGACCCCAAATGCAAGTGCTCCCGGAAGGGACCCAAA
                                                                                                                                                                                                                                                                                                                                GAAGATGGTTATCATCACCACCAAGAGCGTGTCCAGGTACCGAGGTCCAGGGCACTGCCT
                                                                                                                                                                                                                                                                                                                                                                                  GATCCGCTACAGCGACGTGAAGCTGGAAATGAAGCCAAAGTACCCGCACTGCGAGGA
                                                                                                                                                                                                                                                                                                                                                                                                               GCGCAGGGTCTACGAAGAATAGGGTGAAAAACCTCAGAAGGGAAAACTCCAAAACCAGTTG
                                                                                                                                                                       GCGGAGACAAGCGCAGCGCACGCCCACAGACAGCCCTGGGCATCCACCGACGG
                                                                                                                                                          Gaps
                                                                                                                                                         ö
                                                                                                                                          Length 1685
                                                                                                                                                         0; Indels
                                                                                                                                           8
                                                                                                                                           DB
                                                                                                                                           Query Match 100.0%; Score 1685; Best Local Similarity 100.0%; Pred. No. 0; Matches 1685; Conservative 0; Mismatches
28-JUL-2000; 2000WO-USO20710.
24-AUG-2000; 2000WS-00703238.
08-NOV-2000; 2000US-00703749.
27-NOV-2000; 2000US-00723749.
01-DEC-2000; 2000WS-00747259.
20-DEC-2000; 2000WS-00747259.
20-DEC-2000; 2000WS-00747559.
22-MAR-2001; 2001WS-00816920.
22-MAR-2001; 2001WS-00816920.
22-MAR-2001; 2001WS-00816920.
22-MAR-2001; 2001WS-00816920.
22-MAR-2001; 2001WS-00816920.
22-MAR-2001; 2001WS-00854280.
10-MAY-2001; 2001WS-00854280.
25-MAY-2001; 2001WS-00854280.
25-MAY-2001; 2001WS-00854280.
25-MAY-2001; 2001WS-00854280.
25-MAY-2001; 2001WS-00854280.
25-MAY-2001; 2001WS-00874503.
14-JUN-2001; 2001WS-00874503.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        661
                                                                                                                                                                                     Н
                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                             241
                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                       361
                                                                                                                                                                                                                                                                                                                                                                      361
                                                                                                                                                                                                                                                                                                                                                                                   421
                                                                                                                                                                                                                                                                                                                                                                                                  421
                                                                                                                                                                                                                                                                                                                                                                                                                481
                                                                                                                                                                                                                                                                                                                                                                                                                               481
                                                                                                                                                                                                                                                                                                                                                                                                                                              541
                                                                                                                                                                                                      61
                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                   121
```

6 6 6 6 6

8 6 6 6 6

5 B 5 B 5 B 5 B 5 B 5 B 5

98US-0083499P.
98US-008350P.
98US-0083558P.
98US-0083558P.
98US-0083558P.
98US-0083558P.
98US-0083558P.
98US-008459P.
98US-008459P.
98US-008459P.
98US-008453P.
98US-008453P.
98US-008453P.
98US-008453P.
98US-008453P.
98US-008453P.
98US-0085823P.
98US-013322P.
99US-0133222P.
99US-013314452P.
99US-01314452P.
99US-01314452P.
99US-01314452P.
99US-014653PP. 29-APR-1998;
29-APR-1998;
29-APR-1998;
29-APR-1998;
29-APR-1998;
30-APR-1998;
30-APR-1998;
66-MAY-1998;
66-MAY-1998;
66-MAY-1998;
67-MAY-1998;
67-MAY-1998;
67-MAY-1998;
67-MAY-1998;
67-MAY-1998;
67-MAY-1998;
67-MAY-1998;
67-MAY-1998;
68-MAY-1998;
69-MAY-1998;
69-MAY-1998;
60-MAY-1998;
60-MAY-1998;
60-MAY-1998;
60-MAY-1998;
60-MAY-1998;
60-MAY-1998;
60-MAY-1999;
60-MAY-1999;
60-MAY-1999;
60-MAY-1999;
61-MAR-1999;
61-MAR-1998;
61-MA Human, PRO polypeptide, secreted protein, transmembrane protein, cell death, neuropathy, neuropathy related disease; Charcot-Marie-Tooth disorder, Refoun" a disease, Krabbe's disease, chromosome mapping, gene mapping, genetic disorder, septic shock, antibacterial, immunosuppressive, neuroprotective; gene; ss. Human PRO polynucleotide sequence #94 9710S - 00662249P.
9710S - 00663449P.
9710S - 00663611P.
9710S - 0077643P.
9810S - 00776910P.
9810S - 0078934P.
9810S - 0078934P.
9810S - 0078934P.
9810S - 0078934P.
9810S - 0079664P.
9810S - 0080327P.
9810S - 0081177P.
9810S - 0081336P.
9810S - 0081336P.
9810S - 0081336P.
9810S - 0082368P.
9810S - 0082368P.
9810S - 0083322P.
9810S - 0083322P. 2001US-00978608 entry) (first US2003045462-A1. 17-OCT-1997, 03-NOV-1997, 13-NOV-1997, 11-NAR-1998, 11-MAR-1998, 11-MAR-1998, 11-MAR-1998, 12-MAR-1998, 20-MAR-1998, 31-MAR-1998, 32-ARR-1998, 22-ARR-1998, 22-ARR-1998, 23-ARR-1998, 23-ARR-1998, 23-ARR-1998, 23-ARR-1998, 23-ARR-1998, 23-ARR-1998, 23-ARR-1998, Homo sapiens 16-OCT-2001; 04-DEC-2003 06-MAR-2003

```
1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1081 GTTGGGTGCCAGAAAAAGGTGCTTCATTCCCCCCCTGGTTAATTTTTACACACCCCTAGGA 1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | TCCCAACCTGAGGATTTCTGAAAGGTTCACAGGTTCAATATTTAATGCTTCAGAAGCATG 1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1141 AACATTTCCAAGATCCTGTGATGGCGAGACAAATGATCCTTAAAGAAGGTGTGGGGGTCTT 1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1261 TGAGGTTCCCAACACTGTCAGCAAAAACCTTAGGAGAAAAACTTAAAAATATATGAATAA 1320
                                                                                                                                                                         480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1261 TGAGGTTCCCAACACTGTCAGCAAAAACCTTAGGAGAAAAACTTAAAAATATATGAATACA 1320
                                                                                                      GCACCCCAAGCTGCAGAGCACCACGAGGGCTTCATCAAGTGGTACAACGCCTGGAACGAGAA 480
                                                                                                                                                                                                                                                               481 GCGCAGGGTCTACGAAGAATAGGGTGAAAAACTCCAGAAAACTCCAAAACCAGTTG 540
                                                                                                                                                                                                                                                                                                          600
                                                                                                                                                                                                                                                                                                                                             600
                                                                                                                                                                                                                                                                                                                                                                             999
                                                                                                                                                                                                                                                                                                                                                                                                            9
                                                                                                                                                                                                                                                                                                                                                                                                                                              720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              960
         241 GGCGCTGTACACCGCGCGTGTGGACGGGTCCAAATGCAAGTGCTCCCGGAAGGGACCCAA 300
                                                                                                                                                                                                                                          GCGCAGGGTCTACGAAGAATAGGGTGAAAAACCTCAGAAGGGAAAACTCCAAAACCAGTTG
                                                                                                                                                                                                                                                                                                         301 GATCCGCTACAGCGACGTGAAGAAGTGGAATGAAGCCAAAGTACCCGCACTGCGAGGA
                                                                                                                                                                         GCACCCCAAGCTGCAGAGCACCAAGCGCTTCATCAAGTGGTACAACGCCTGGAACGAGAA
                                                                                                                                                                                                                                                                                                                                                                        601 AAAAAAAAAAAAAACCTTTCTCACAGGCATAAGACACAAATTATATATTGTTATGA
                                                                                                                                                                                                                                                                                                                                                                                                    961 AGCTGCCACGGGCTCTCCTGGGCTTATGGCCGGTCACAGCCTCAGTGTGACTCCACAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCCCTGTAGCCGGGCAAGCAGGACCAGGTCTCTGCAGCATCTGTTCTCTGAGGAACTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1021 GCCCTGTAGCCGGGCAAGCAGGAGCAGGTCTCTCTGCATCTGTTCTCTGAGGAACTCAA
                                         301 GATCCGCTACAGGGACGTGAAGGTGGAAATGAAGGCAAAAGTACCCGCACTGCGAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TACATCTGAGCTTTATAAGCGCCCGGGAGGAACAATGAGCTTGGTGGACACATTTCATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              961 AGCTGCCACGGGTCTCCTGGGCTTATGGCCGGTCACAGCCTCAGTGTGACTCCACAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1081 GITTGGTTGCCAGAAAATGTGCTTCATTCCCCCCTGGTTAATTTTTACACACCCTAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1141 AACATTTCCAAGATCCTGTGATGGCGAGACAAATGATCCTTAAAGAAGGTGTGGGGTCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1201
                                                                                                                                                                         421
                                                                                                                                                                                                                                           481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1321
                                                                                                                                                                                                       421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               841
                                     ò
                                                                g
                                                                                             \delta
                                                                                                                               g
                                                                                                                                                                  ઇ
                                                                                                                                                                                                  g
                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                    유
                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                      a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        d
                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | GGCGCTGTACACCGCGCGCGTGTGGACGGGTCCAAATGCAAGTGCTCCCGGAAGGGACCCAA 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CGCAGCCGGAGCCAGCAGAGCCGGAAGGCGCGCCCGGGCAGAAAAGCCGAGCAGAGCT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 GCGGAGACAAGCGCAGAGCGCACGCCACGGCCACAGACAGCCCTGGGCATCCACCGACGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 GCGGAGACAAGCGCAGAGCGCAAGCGCCACGGCCACAGACAGCCCTGGGCATCCACCGACGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 1685;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match

100.0%; Score 1685;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 1685; Conservative 0; Mismatches
25-AUG-1999; 99US-00380137.
25-AUG-1999; 99US-00380138.
25-AUG-1999; 99US-00380138.
25-AUG-1999; 99US-00380138.
30-NOV-1999; 99WG-0US228313.
02-DEC-1999; 99WG-US228551.
16-DEC-1999; 99WG-US228551.
16-DEC-1999; 99WG-US238551.
30-DEC-1999; 99WG-US238551.
30-MAR-2000; 2000WG-US2005561.
30-MAR-2000; 2000WG-US2014941.
31-MAR-2000; 2000WG-US2014941.
32-MAR-2000; 2000WG-US2014941.
32-MAR-2000; 2000WG-US2014941.
32-MAR-2000; 2000WG-US2014941.
32-MAR-2000; 2000WG-US2014941.
32-MAR-2000; 2000WG-US2014941.
32-MAR-2000; 2000WG-US201496.
32-MAR-2000; 2000WG-US201496.
32-MAR-2001; 2001WG-US301496.
32-MAR-2001; 2001WG-US301496.
32-MAR-2001; 2001WG-US301496.
32-MAR-2001; 2001WG-US301496.
32-MAR-2001; 2001WG-US301769.
31-JUN-2001; 2001WG-US301769.
31-JUN-2001; 2001WG-US301769.
32-MAR-2001; 2001WG-US301769.
33-MAR-2001; 2001WG-US301769.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2001US-00918585
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (GETH ) GENENTECH INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61
```

8 6 8

à

8 8 8

g

ò	1381 TTCTTTCCCTCACCACAGAACAIGCAGTACTAAAGCAATATATTTGTGATTCCCCAT 1440	0
qq		0
ò	1441 GIAATICTICAAIGITAAACAGIGCAGICCTCTITICGAAAGCTAAGAIGACCAIGCGCCC 1500	0
qq		0
ò	1501 TITCTCTCTGTACATATACCCTTAAGAACGCCCCCTCCACACACA	0
qu	1501 TITCCICIGIACAIRIACCCIINAGAACGCCCCCCCCCACACACTGCCCCCCAGAGIAIRIGC 1560	0
ò	1561 CGCATTGTACTGCTGTGTTATATGCTATGTACATGTCAGAAACCATTAGCATTGCATGCA	0
QQ	1561 CGCATTGTACTGCTGTGTTATATGCTATGTACATGTCAGAACCATTAGCATTGCATGCA	o.
ŏ	1621 GGTTTCATATTCTTTCTAAGATGGAAAGTAATAAAATATATTTGAAATGTAAAAAA	0
g	1621 GGTTTCATATTCTTTCTAAGATGGAAGGTAATAAAATATATTTGAAATGTAAAAAA	0
ò	1681 AAAAA 1685	
d		

Search completed: April 26, 2004, 05:41:06 Job time : 711 secs

GenCore version 5.1.6 Copyright (c) 1993 - 2004 Compugen Ltd.

\*002 20.01.CI 02 1QA mom \*

OM nucleic - nucleic search, using sw model

April 26, 2004, 05:10:44; Search time 4581 Seconds (without alignments) 10984.015 Million cell updates/sec

Run on:

Title: Perfect score: Sequence:

Scoring table:

IDENTITY NUC Gapop 10.0 , Gapext 1.0

27513289 seqs, 14931090276 residues Searched:

Total number of hits satisfying chosen parameters:

55026578

Minimum DB seq length: 0 Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

EST:\* Database :

1: em estba:\*
2: em\_esthum:\*
3: em\_esthum:\*
5: em\_estru:\*
6: em\_estro:\*
7: em\_estro:\*
10: gb\_est:\*
10: gb\_est:\*
11: gb\_et:\*
11: gb\_et:\*
11: gb\_est:\*
12: em\_estru:\*
13: gb\_est:\*
14: gb\_est:\*
14: gb\_est:\*
15: em\_estru:\*
16: em\_estru:\*
17: em\_gss\_hum:\*
16: em\_gss\_hum:\*
17: em\_gss\_hum:\*
18: em\_gss\_hum:\*
18: em\_gss\_hum:\*
18: em\_gss\_hum:\*
19: em\_gss\_hum:\*
19: em\_gss\_hum:\*
10: em\_gss\_hum:\*
10: em\_gss\_hum:\*
11: em\_gss\_hum:\*
12: em\_gss\_hum:\*
13: em\_gss\_hum:\*
14: em\_gss\_hum:\*
15: em\_gss\_hum:\*
16: em\_gss\_hum:\*
17: em\_gss\_hum:\*
18: em\_gss\_hum:\*
18: em\_gss\_hum:\*
18: em\_gss\_hum:\*
19: em\_gss\_hum:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

		Describtion				~
	;	Q.T	12 BM809019	CA975881	BG678414	AL543855
		ngth DB	1019 12	916 14	976 12	953
ф	Query	Match Le	53.1		20.0	0.00
		Score	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0000	4.048	0.00
	Result	No.	;	10	3 m	1 4

BG696197 602659321 BQ716973 AGENCOURT	175 AL570175	7521 60262516	9254 60262733	930	7005 60262364	19890 60262639	3808	6112	06404	N	10478	18578	75170	22380	18215	31049	21407	50107	615	613	665	369	236	071	277	62	267	518	697	83	415	277	999	866	290	955	1 UI-	847	121
12 BG696197 13 BO716973	AL57017	2 BG67752	2 BG67925	3 BQ88930	2 BG67700	2 BG67989	3 BU73380	L AK07611	3 BX10640	2 BG40038	3 BU74047	4 CA41857	3 BQ57517	3 BQ92238	3 BQ44821	2 BG68104	2 BM72140	4 CB55010	1 AK0046	4 CK00461	2 BG69966	4 CD67336	2 BM70623	2 BG57207	2 BG61927	AV733062	2 BG62226	2 BI7575	4 CB21669	AV65129	4 CD67541	2 BG70027	3 BU73699	2 BM99186	2 BG39929	4 CB95995	2 BM6	2 BG70084	2 BM66912
858									72																														
4.9.6 6.6		7	7.	7.	ů.	4	4	ς.				_;	_;	ä	ä	ö	ο.	ω.	œ.	œ.	7	Ε.	Ľ.	۲.	Ġ	ė	ø.	ė.	v.	ý	'n.	'n	ın.	'n.	'n	ď	'n	4	
835	8000	5	œ	96	23	4,	4	22	~	714.6	ဖ	669	91	691.4	90	8	w	662.4	φ	2	638.6	Ψ	627	24	8	612.6	Ξ	H	Ψ	610	604.2	ш	593	591	8	6	589.2		587
s v	۰,	α	σ	10	1	12	13	14	15	16	17	18	19	20	21	22	23	24	25	56	27	28	53	30	31	32	33	34	35	36	37	38	39	40	41	4.2	4 . ا	4	4 4
	Ü	)					U				U	υ	υ		υ							O									U		U	U					O

## ALIGNMENTS

RESULT 1

	BM809019 1019 bp mRNA linear EST 05-MAR-2002	AGENCOURT_6618019 NIH_MGC_124 Homo sapiens cDNA clone IMAGE:5/34462	5', mRNA seguence.	BM809019	BM809019.1 GI:19125842	EST.	Homo sapiens (human)	Homo sapiens	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;	Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.	1 (bases 1 to 1019)	NIH-MGC http://mgc.nci.nih.gov/.	National Institutes of Health, Mammalian Gene Collection (MGC)	Unpublished (1999)	Contact: Robert Strausberg, Ph.D.	Email: cgapbs-r@mail.nih.gov	Tissue Procurement: Invitrogen	cDNA Library Preparation: Life Technologies, Inc.	CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)	DNA Sequencing by: Agencourt Bioscience Corporation	clone distribution: MGC clone distribution information can be	found through the I.M.A.G.E. Consortium/LLNL at:	http://image.llnl.gov	Plate: LLAM12739 row: m column: 23	High quality sequence stop: 661.	
BM809019	rocus	DEFINITION		ACCESSION	VERSION	KEYWORDS	SOURCE	ORGANISM			REFERENCE	AUTHORS	TITLE	JOURNAL	COMMENT											

```
CA975881
AGENCOURT 8954747 Lupski sciatic_nerve Homo sapiens cDNA clone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5.-GACTAGTICTAGATCGCGAGCGCCCT(15)-3'. Size selected > 1 kb for average insert length 1.87 kb. This is a primary library, non-amplified. Library constructed by Life Technologies and donated by J. Lupski, M.D./Ph.D. (Baylor College of Medicine) and is available through Life Technologies."
                                                                           1399 CAGAACATGCAGTACTAAAGCAATATATTTTGTGATTCCCCCATGTAATTCTTCAATGTTAA 1458
                                                                                                                                                                                                                   1459 ACAGTGCAGTCCTCTTTCGAAAGCTAAGATGACCATGCG-CCCTTTCCTCTGTACATATA 1517
                                                                                                                                                                                                                                                                                                                                                           1518 CCCTTAAGAACGCCCCC--TCCACACACTGCCCCCAGTATATGCCGCATTGTACTGCTG 1575
                                                                                                                                                                                                                                                                                   851 ACAGIGCAGICCICITICAAAAGCIAAGAIGACCAIGCGCCCCITICCICIGIACAIAIA 910
                                                                                                                                                                                                                                                                                                                                                                                                                       911 cecertraaaacecececerreaaaaaaaeececeeagaaraaeececearreecacere 970
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The sease 1 to 916)

S NIH-MGC http://mgc.nci.nih.gov/.

National Institutes of Health, Mammalian Gene Collection (MGC)

Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Dr. James R. Lupski
CONA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
http://mage.lln.gov cow: b column: 03
High quality sequence stop: 685.
Location/Qualifiers
           Eukaryoča, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /close lib="Lupski sciatic_nerve"
/note="Vector: pGMV-SPORT6 (Life Technologies); Site_1:
Not1; Site_2: Sall; cDNA made by oligo-dr priming.
Trectionally cloned using the following adaptors:
5'-TCGACCCACGGGGCGCG-3' and
                                                                                                                                               791 CAGAACATGCAGTACTAAAGCAATATATTTGTGATTCCCCCATGTAATTCCTCAATGTTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                52.8%; Score 890.2; DB 14; Length 916; 98.9%; Pred. No. 1.7e-119; tive 0; Mismatches 9; Indels 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /tissue_type="sciatic nerve"
/dev_stage="adult, 70 yr"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1576 TGTTATATGCTATGTACATGTCAGAA 1601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="Homo sapiens"
/mol type="mRNA"
/db xref="taxon:9606"
/clone="IMAGE:6202274"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               971 CTGGGGGTTATATGCCTATGGTACAA 996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CA975881.1 GI:27508535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /sex="male"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 98.9
Matches 906; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1. .916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CA975881
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 2
CA975881
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VERSION
KEYWORDS
SOURCE
                                                                   à
                                                                                                                                g
                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                         /organism="Homo sapiens"
/organism="Homo sapiens"
/mol type="mknA"
/db xref="taxon:9606"
/clone="InAGES:5734462"
/tlssue_type="hippocampus"
/tlssue_type="hi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGGGCTTATGGCCGGTCACAGCCTCAGTGTGACTCCACAGTGGCCCCTGTAGCCGGGCAA 1038
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCAGGAGCAGGTCTCTCCATCTGTTCTCTGAGGAACTCAAGTTTGGTTGCCAGAAAAA 1098
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGTGCTTCATTCCCCCCCCTGGTTAATTTTTACACCCTAGGAAACATTTCCAAGATCCTG 1158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGATGGCGAGACAAATGATCCTTAAAGAAGGTGTGGGGGTCTTTCCCAACCTGAGGATTTC 1218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGAAAGGTTCACAGGTTCAATATTTAATGCTTCAGAAGCATGTGAGGTTCCCAACACTGT 1278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAGCAAAACCTTAGGAGAAAACTTAAAAATATATGAATACATGCGCAATACACACGTAC 1338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCAGTTTTTACATTTTATAGCTGCGAAAGGCTTCCAGATGGGAGACCCATCTCT 130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  311 AGCTIGGGAAGCTICCGCTIAGAGGTCCTGGCGCCTCGGCACCAGCTGCCACGGCTCTCC 370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      431 GCAGGAGCAGGTCTCTCTGCATCTGTTCTCTGAGGAACTCAAGTTTGGTTGCCAGAAAAA 490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGTGCTTCATTCCCCCCTGGTTAATTTTTACACACCCTAGGAAACATTCCAAGATCCTG 550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     671 CAGCAAAAACCTTAAAGAGAAAACTTANAAATATGAATACATGCGCAATACATACACGCTAC 730
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCTTTCTCACAGGCATAAGACACAAATTATATATTGTTATGAAGCACTTTTTACCAACGG 678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCAGTITTTACATTTTATAGCTGCGTGCGAAAGGCTTCCAGATGGGAGACCCATCTCTT 738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCGCCCGGGAGGAACAATGAGCTTGGTGGACACATTTCATTGCAGTGTTGCTCCATTCCT 918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCGCCCGGGAGGAACAATGAGCTTGGTGGACACATTTCATTGCAGTGTTGCTCCATTCCT 310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGCTTGGGAAGCTTCCGCTTAGAGGTCCTGGCGCCTCGGCACAGCTGCCACGGGCTCTCC 978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGATGGCGAGACAATGATCCTTAAAGAAGGTGTGGGGTCTTTCCCAACCTGAGGATTTC 610
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTTTTTAAAAAATGCTTTTTTGTATTTGTCCATACGTCACTATACATCTGAGCTTTATAA 858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CITITITAAAAAAGCITITITIGIATITIGICCATACGICACTATACATCIGAGCITIATAA 250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 rorricordadecaraadadadadadaarinararararararaadaadecacrirriraccaadeg 70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGTGCTCCAGACTTCATCACAGGCTGCTTTTTATCAAAAAGGGGAAAACTCATGCCTTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 1019;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     53.1%; Score 895; DB 12; Length 101
95.5%; Pred. No. 3.3e-120;
tive 0; Mismatches 41; Indels
   Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 942; Conservat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        551
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1039
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1099
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             739
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        979
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                491
                                         source
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORIGIN
```

g

셤  $\overset{\sim}{\circ}$ g ò

ò

8 8 8

8 B S

유 장 영

8 6 8 6 8 6

8

ä

SOUR	REFE AU TI	COMM		•	FEAT			ORIG	M We	6 8 8	6 A 3	3 8 8	8 8	ò	qa	ð :	8 &	a
684 TITTACATTTTATAGCTGCGTGCGAAAGGCTTCCAGATGGGAGACCCATCTCTCTTGTGC 743 	744 TCCAGACTTCATCACAGGCTGCTTTTTATCAAAAAGGGAAAAACTCATGCCTTTCCTTT 803 	804 TAAAAATGCTTTTTTGTATTTGTCATACGTCACTATACATCTGAGCTTTATAAGCGCC 863 	864 CGGGAGGAACAAIGAGCTIGGIGGACACAITICAIIGCAGIGIIGCICCAIICCIAGCII 923 	924 GGGAAGCTTCCGCTTAGAGGTCCTGGCGCCTCGGCACGCCTCCCGGGC 983 	984 TTATGGCCGGTCACAGCCTCAGTGTGACTCCACAGTGGCCCCTGTAGCCGGGCAAGCAGG 1043	1044 AGCAGGTCTCTGCATCTGTTCTCTGAGGAACTCAAGTTTGGTTGCCAGAAAATGTGC 1103 	1104 TICATICCCCCTGGTIAATTITIACACACCCTAGGAAACATITCCAAGATCCTGTGATG 1163 	1164 GCGAGACAAATGATCCTTAAAGAAGGTGTGGGGTCTTTCCCAACCTGAGGATTTCTGAAA 1223 		AAAACCTTAGGAGAAACTTAAAATATATGAATACATGCGCAATACACAGCTACAGACACACAACAACATAAGAGAAAAAAAA	CACATTCTGTTGACAAGGAAAACCTTCAAGGATGTTTCTTTC	CATGCAGTACTAAAGCAATATTTGTGATTCCCCATGTAATTCTTCAATGTTAAACAGT 14		781 GCAGTCCTCTTTCGAAAGCTAAGATGACCATGCGCCCCTTTCCTCTGTACATATACCCCT 840	AAGAACGCCCCTCCACACACTGCCCCCAGTATATGCCGCATTGTACTGCTGTGTTATA		06	
<i>ò</i> a	ò fi	р В	8 8	중 음	ò a	ç, d	è 8	8 6	8 8	8 8	\$ g	જે ક	8 8	Q	à i	a :	S 2	

602625062F1 NCI\_CGAP\_Skn4 Homo sapiens cDNA clone IMAGE:4750214 5', mRNA sequence.
BG678414
BG678414.1 GI:13909811
EST.

RESULT 3 BG678414 LOCUS DEFINITION

ACCESSION VERSION KEYWORDS

```
Homo sapiens (human)
Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.

Dases 1 to 976)
In (bases 1 to 976)
In (bases 1 to 976)
In Historial Institutes of Health, Mammalian Gene Collection (MGC)
In National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
In Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.inh.gov
Tissue Procurement: James Cleaver, M.D.
CONA Library Preparation: Life Technologies, Inc.
CONA Library Preparation: Life Technologies, Inc.
CONA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLANloGot Tow: k column: 15
High quality sequence stop: 864.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          976 recresectratesecestracascereagereagrandaececaacasces 1035
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1036 CAAGCAGGAGCAGGTCTCTCTGCATCTCTGAGGAACTCAAGTTTGGTTGCCAGAA 1095
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1096 AAATGTGCTTCATTCCCCCCTGGTTAATTTTTACACCCTAGGAAACATTTCCAAGATC 1155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /Lissue_type="squamous cell carcinoma" / Lissue_type="squamous cell carcinoma" / Lab host="DH10B (TI phage-resistant)" / Lone lih="NCI CGAP SkM4" / Lote="Organ: skin; Vector: pCMV-SPORT6; Site_1: NotI; Site_2: SAlI; Cloned undirectionally. Primer: Oligo dT. Average insert size 1.5kb; Library constructed by Life Technologies. Note: this is a NCI_CGAP Library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   676 CGGTCAGTTTTTACATTTTATAGCTGCGAAAGGCTTCCAGATGGGAACCCATCTC 735
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61 CGGTCAGTTTTTACATTTTATAGCTGCGTGCGTAGCTTCCAGATGGGAGACCCCATCTC 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCTTGTGCTCCAGACTTCATCACAGGCTGCTTTTTATCAAAAAGGGGAAAAACTCATGCCT 795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181 TTCCTTTTTAAAAAAGCTTTTTTGTATTTGTCCATACGTCACTATACATCTGAGCTTTA 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     421 CAAGCAGGAGCAGGTCTCTCTGCATCTCTCTGAGGAACTCAAAGTTTGGTTGCCAGAA 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121 retrerecreacatricarcacaecrecritrirarcaaaaaeeeaaaacrearecr 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TICCTITITAAAAAIGCTTTTTTTTTTTTTTCCATACGTCACTATACATCTGAGCTTTA 855
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              856 TAAGCGCCCGGGAGGAACAATGAGCTTGGTGGACATTTCATTGCAGTGTTGCTCCATT 915
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       916 CCTAGCTTGGGAAGCTTCCGCTTAGAGGTCCTGGCGCCTCGGCACAGCTGCCACGGGCTC 975
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     301 ceracerredeaaderredecrradaderecrededecredecadedededededecre 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              361 recressionarissicades de acceptados de acceptados de construir de 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 CTTTCTTTCTCACAGGCATAAGACACAAATTATATATATTGTTATGAAGCACTTTTTACCAA 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   616 CITICITICICACAGGCATAAGACACAAATTATATATTGTTATGAAGCACTTTTTACCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          uery Match 50.2%; Score 846.4; DB 12; Length 976; lest Local Similarity 97.7%; Pred. No. 3.6e-113; latches 891; Conservative 0; Mismatches 16; Indels 5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:4750214"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            736
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     , 964
                                RCE
RGANISM
                                                                                                                                                                                                                                                      TERENCE
UTHORS
TITLE
FOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
```

us-09-978-189-369.rst

Page 4

Query Match 49.8%; Score 839.2; DB 9; Length 953; Best Local Similarity 96.6%; Pred. No. 4e-112; Matches 862; Conservative 22; Mismatches 5; Indels 3; Gaps 3;	Qy 707 GAAAGGCTTCCAGAAGGAACCATCTCTTGTGCTCCAGACTTCATCACAGGCTGCT 766	Qy 767 ITTAICAAAAGGGGAAAACTCAIGCCTITCCTTTTAAAAAAAGGCTITTG 826	Qy 827 TCCATACGTCACTATACATCTGAGCTTTATAAGCGCCCGGGAGGAACAATGAGCTTGGTG 886  Db 182 TCCATACGTCACTATACATCTGAGCTTTATAAGCGCCCGGGAGGAACAATGAGCTTGGTG 241	QY 887 GACACAT-TTCATTGCAGTGTTGCTCCATTCCTAGCTTGGGGAAGCTTCCGCTTAGAGGTC 945	94 CTGGGGCTCGGGACAGCTGCCACGGGCTCT-CCTGGGCTGACGGCTCA 1004	09 1005 GT-GTGACTCCACAGTGGCCCCTGTAGCCGGGCAAGCAGGAGCAGGTCTCTCTGCATCTG 1063	Oy 1064 TICTCTGAGGAACTCAAGTTTGGTTGCCGGAAAATGTGCTTCCCCCCTGGTTAAI 1123	QY 1124 TITTACACACCCTAGBAACATITCCAAGATCCTGTGATGGCGAGACAAATGATCCTTAA 1183	QY         1184 AGAAGGTGTGGGGTCTTTCCCAACCTGAGGTTTCTGAAAGGTTCACAGGTTCAATATTT 1243           Db         542 AGAAGGTGTGGGGTCTTTCCCAACCTGAGGATTTCTGAAAGGTTCACAGGTTCAATATTT 601	OY 1244 ANTGCTTCAGAAGCATGTGAGGTTCCCAACACTGTCAGCAAAAACCTTAGGAGAAAACTT 1303	Qy         1304         AAAAATATATGAATACATGCGCAATACACGGCTACAGGCTACAGACACATTCTGTTGACAAGGGA         1363           Db         662         AAAAATATGAATAMATGCGCAATACACCACACACATTCTGTTGACAAGGGA         721	1364 AAACCTTCAAAGCATGTTTCTTTCCCTCACACAGAACATGCAGTACTAAAGCAATA	722 AAACCTTCAAAGCATGTTTCTTTCCCTCACCAACAGAACATGCAGTACTAAAGCAATA 1424 DAITTGTGAITCCCCATGTAATTCTTCAATGTTAAACAGTGCAGTCCTCTTTCGAAAGCT	Db 782 TAITTGTGATTCCCCATGTAATTCTTCAATGTTAAAMAGTGCAGTCCTCWTTCGAAAGCT 841  Qy 1484 AAGATGACCATGCGCCTTTCCTCTGTACATATACCTTAAGAACGCCCCCTCCACAC 1543	842 Aadargaccargecerrrrerrerahearahacarahadaakeeceer	OY 1544 TGCCCCCAGTATATGCCGCATTGTATGTGTGTTATGTGTTATGTGTGTG	858 bp mRNA linear EST 07-MAY-20	602659321F1 NCI_CGAP_Skn3 Homo sapiens cDNA clone IMAGE:480240 mRNA sequence. BG696197.1 GI:13961096
1156 CIGIGARGACAAATGARCCTTAAAGAAGGIGIGGGGTCTTTCCCAACCTGAGGAT 1215	TCTGAAAGGTTCACAGGTTCATATTTAATGCTTCAGAAGCATCCGACCT 80 TCTGAAAGGTTCCAAGGTTCCAAATTTTAATGCTTCAGAAGCATGTGAGAGTTCCCAACC 12 TCTGAAAGGTTCAAAGGTTCAATATTTAATGCTTCAGAAGGTTCCCCAACAC	TACACAGC 13	CTCACCA 13	14	15	CATATACCTIA 911	·	AL543855 TION AL543855 Homo sapiens PLACENTA COT 25-NORMALIZED Homo sapiens CDNA COT 25-NORMALIZED Homo sapiens CDNA Clone CS0D1005Y122 5-PRIME, mRNA sequence.				Contact: Genoscope Genoscope - Centre National de Sequencage BP 191 91006 EVRY cedex - France	LEMBALI: Seqreggenoscope.cns.ir, Web : www.genoscope.cns.ir Library was constructed by Life Technologies, a division of Invitrogen. This sequence belongs to sequence cluster 3123.r For more information about this cluster, see	http://www.genoscope.cns.fr/ ogi-bin/cluster.cgi?esq=CSODIOO5BEI1QPl&cluster=3123.r. Contact : Feng Liang Email : fliang@lifetech.com URL : http://fulllength.invitrogen.com/ TuvitroGen Cornoration 1600	Faraday Avenue Genoscope Sequence ID : CSODI0058E11QPI.	ource	/clone="CSORIO5YI22" /tissue_type="PLACENTA COT 25-NORMALIZED" /clone_lib="Hamo sapiens PLACENTA COT 25-NORMALIZED" /note="ligt strand cDNA was primed with a NotI-oligo(dT)	
& B	\ \times \( \frac{1}{2} \)	, Q	දු ද	<u>ራ</u> 4	کو م	1 & A	RESULT 4	LOCUS	ACCESSION VERSION KEYWORDS SOURCE	REFEREN	AUTHORS TITLE JOURNAL COMMENT				FEATURE	o m		ORIGIN

EST.

KEYWORDS

Ŋ

```
CCCAACCTGAGGATTTCTGAAAGGTTCACAGGTTCAATATTTAATGCTTCAGAAGCATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1. 851
/organism="Homo sapiens"
/mol type="mRNA"
/db xref="taxon:9666"
/clone="lYAAGE:6187072"
/eex="male"
                                                                                                                                                                                                                                                                                                                                                                                                                                  1501 TTTCCTCTGTACATATACC 1519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  840 TITCCTCTGTACATATACC 858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens (human)
                                                                                                                                                                            1322
      1202
                                                                                         1262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 6
BQ716973
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                       g
                                                                                                                                                                          ò
                                                                                                                                                                                                            a
                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                      원
                                                                                                                                                                                                                                                                                                                                                                                           원
                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                       8
                                         Divaryota, Metacoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Eukaryota; Metacoa; Chordata; Catarrhini; Hominidae; Homo.

I (Dases I to 589)

NIH-MCC http://mgc.nci.nih.gov/.

Institutes of Health, Mammalian Gene Collection (MGC)

Unpublished (1999)

Contact: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.nih.gov

Tissue procurement: James Cleaver, M.D.

CDNA Library Preparation: Life Technologies, Inc.

CDNA Library Preparation: Life Technologies, Inc.

CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LIML) DNA

Sequencing by: Incyte Genomics, Inc.

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LINL at:

http://image.llni.gov

Location/Cualifiers

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1142 ACATTTCCAAGATCCTGTGATGGCGAGACAAATGATCCTTAAAGAAGGTGTGGGGGTTTT 1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1082 TTTGGTTGCCAGAAAATGTGCTTCATTCCCCCCTGGTTAATTTTTACACACCCTAGGAA 1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCCCTGTAGCCGGGCAAGCAGGAGCAGGTCTCTCTGTTCTCTGTGGAACTCAAG 1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ,
,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301 derdecakedderereteraddeerrranddeeddarakaareraarahaarreeadaada 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61 GGGAGACCCATCTCTTGTGCTCCAGACTTCATCACAGGCTGCTTTTTATCAAAAGGG 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /mol_type="mRNA"
/db xref="taxon:8606"
/db xref="taxon:8606"
/clone=linder:4802404"
/lab host="DHIOB (T1 phage-resistant)"
/clone_lib="NCI CGAP Skn3"
/note="Organ: skin; Vector: pCMV-SPORT6; Site_1: Not1;
Site_2: Sal1; Cloned unidirectionally. Primer: Oligo dT.
Average insert size 1.5kb. Library constructed by Life
Technologies. Note: this is a NCI_CGAP Library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        842 ACATCTGAGCTTTATAAGCGCCCGGGAGGAACAATGAGCTTGGTGGACACATTTCATTGC 901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           662 GCACTITITACCAACGGICAGTITITACATITITATAGCIGCGAAAAGGCTICCAGAI 721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 GCACTITITACCAACGGTCAGITITITACATITITATAGCTGCGTGCGAAAGGCTTCCAGAT 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        782 GAAAACTCATGCCTTTCCTTTTAAAAAIGCTTTTTTGTATTTGTCCATACGTCACTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                962 GCTGCCACGGGCTCTCCTGGGCTTATGGCCGGTCACAGCCTCAGTGTGACTCCACAGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 361 CCCCTGTAGCCGGGCAAGCAGGAGCAGGTCTCTCTGCATCTGTTCTCTGAGGAACTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    722 GGGAGACCCATCTCTTGTGCTCCAGACTTCATCACAGGCTGCTTTTTATCAAAAAGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121 GAAAACTCATGCCTTTCCTTTTTAAAAATGCTTTTTTGTATTTGTCCATACGTCACTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                902 AGTGTTGCTCCATTCCTAGCTTGGGAAGCTTCCGCTTAGAGGTCCTGGCGCCTCGGCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
49.6%; Score 835; DB 12; Length 858;
Best Local Similarity 99.8%; Pred. No. 1.7e-111;
Matches 857; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                              1. .858
/organism="Homo sapiens"
             Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  481
                                  ORGANISM
                                                                                              REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORIGIN
```

g 8 엄 ઠે 요 ठ 8

g ò

임 ò g ò 셤 δ

```
/ issue type="sympathetic trunk"
/ dev_stage="adult, 16 yr"
/ dev_stage="adult, 16 yr"
/ lab_hose="mlupsk" is yrmpathetic_trunk"
/ clone lib="Lupsk; sympathetic_trunk"
/ clone lib; site_1:

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Enkaryota, Metazoa; Chordata, Craniata; Vertebrata; Enteleostomi; Enkaryota; Metazoa; Chordata; Craniata; Vertebrata; Enteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1. (Dases 1 to 851)

2. (Dases 1 to 851)

3. NIH-MCC http://mgc.nci.nih.gov/.

3. NIH-MCC http://mgc.nci.nih.gov/.

3. National Institutes of Health, Mammalian Gene Collection (MGC)

4. Unpublished (1999)

4. Unpublished (1999)

5. Contact: Robert Strausberg, Ph.D.

6. Email: cgapbs-r@mail.nih.gov R. Lupski

7. Issue Procurement: Dr. James R. Lupski

6. Contact: Robert Strausberg, Ph.D.

6. Contact: Robert Strausberg, Ph.D.

7. Sand Procurement: Dr. James R. Lupski

6. Contact: Robert Strausberg, Ph.D.

6. Contact: Robert Strausberg, Ph.D.D.

7. Robert Strausberg, Ph.D.D.

8. Rober
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1382 TCTTTCCCTCACACAACAAGAACATGCAGTACTAAAAGAAATATATTTGTGATTCCCCATG 1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCGCAATACACAGCTACAGACACACATTCTGTTGACAAGGGAAAACCTTCAAAGCATGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1442 TAATTCTTCAATGTTAAACAGTGCAGTCCTCTTTCGAAAGCTAAGATGACCATGCG-CCC
661 GCGCAATACACAGCTACAGACACATTCTGTTGACAAGGGAAAACCTTCAAAGCATGTT
                                                                                                                                                                                                            GAGGITCCCCAACACTGTCAGCAAAAACCTTAGGAGAAAACTTAAAAATATATGAATACAT
```

1513 1572 1632 TCTCCTGGGCCTTATGGCCGCTCACAGCCTCAGTGACTCCACAGTGGCCCCTGTAGCCG 1033 GGCAAGCAGGAGGTCTCTCTGCATCTGTTCTCTGAGGAACTCAAGTTTGGTTGCCAG 1093 1153 TCCTGTGATGGCGAGACAAATGATCCTTAAAGAAGGTGTGGGGGTCTTTCCCCAACCTGAGG 1213 1214 ATTICTGAAAGGTICACAGGTICAATATTIAATGCTICAGAAGCATGTGAGGTICCCAAC 1273 1333 1393 1453 Ä 660 720 240 360 420 480 540 600 780 180 300 913 973 120 9 GCCAAGCAGCAGCAGGTCTCTCTGCATCTGTTCTCTGAGGAACTCAAGTTTGGTTGCCAG 241 AAAATGTGCTTCATTCCCCCCGGGTTAATTTTTTACACGCCCTAGGAACATTTCCAAGA TCCTGTGATGGCGAGACAAATGATCCTTAAAGAAGGTGTGGGGGTCTTTCCCAACCTGAGG 1274 ACTGTCAGCAAAACCTTAGGAGAAAACTTAAAAATATATGAATACATGCGCAATACACA 421 ACTGICAGCAAAAACCTTAGGAGAAAACTTAAAAATATATGAATACATGCGCAATACACA 1394 CACAACAGAACATGCAGTACTAAAGCAATATATTTGTGATTCCCCATGTAATTCTTCAAT GTTAAACAGTGCAGTCCTCTTTCGAAAGCTAAGATGACCATGCGCCCTTTCCTCTGTACA 601 GTTAAACAGTGCAGTCCTCTTTCGAAAGCTAAGATGACCATGCGCCCTTTCCTCTGTACA TATA-CCCTTAAGAACGCCCCCTCCACACTGCCCCCCAGTATATGCCGCATTGTACTG TATACCCCTTAAGAACGCCCCCTCCACACACTGCCCCCCCAGTATATGCCCGCATTGTACTG TATAAGCGCCCGGGAGGAACAATGAGCTTGGTGGACACATTTCATTGCAGTGTTGCTCCA 1094 AAAAATGTGCTTCATTCCCCCCTGGTTAATTTTTACACACCCTAGGAAACATTTCCAAGA TICCIAGCITIGGGAAGCITICCGCTTAGAGGICCIGGCGCCTCGGCACAGCIGCCACGGGC TATAAGCGCCCCGGGAGGAACAATGAGCTTGGTGGACACATTTCATTGCAGTGTTGCTCCA Gaps Score 809.8; DB 13; Length 851; Pred. No. 7.6e-108; 0; Mismatches 7; Indels 1; 48.1%; Conservative Query Match Best Local Similarity Matches 825; Conserv 1454 ( 1514 661 1573 721 1633 781 854 914 19 974 121 1034 181 1154 301 ORIGIN 요 В g ò a 9 ŏ g ò g g ò δ ठे ò ò 엄 ВЪ ò 8 셤  $\delta$ g ò ò

Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 937)

1 (bases 1 to 937)

1 i, W.B., Gruber, C., Jessee, J. and Polayes, D.

Pull-length cDNA libraries and normalization

Unpublished (2001)

On Feb 16, 2001 this sequence version replaced gi:12926227.

Contact: Genoscope
Genoscope - Centre National de Sequencage

BP 191 91006 EVRY cedax - France

Bmail: segref@genoscope.cns.fr, Web: www.genoscope.cns.fr

Library was constructed by Life Technologies, a division of

Library was constructed by Life Technologies, a division of

Library was constructed by Life Technologies, a division of

Library was constructed by Life Technologies, a division of

Library was constructed belongs to sequence cluster 3123.r. Contact

Forgi-bin/cluster.cgi?seq=5001005BEINPI&cluster=3123.r. Contact:

Feng Liang Email: filang@lifetech.com URL:

Forgi-bin/cluster.cgi?seq=5001005BEINPIC

Location/Qualifiers

Location/Qualifiers

Lrce

//crasi.am.Humo.comicace

REFERENCE AUTHORS TITLE JOURNAL COMMENT /organism="Homo sapiens" /mol\_type="mRNA" /db\_xref="taxon:9606" /clone="CS0D1005X122"

FEATURES

RESULT 7
ALS70175/C
LOCUS
LOCUS
LOCUS
LOCUS
ALS70175 Homo sapiens PLACENTA COT 25-NORMALIZED Homo sapiens cDNA
CLONE CSODIO05YI22 3-FRIME, mRNA sequence.
ACCESSION
ALS70175
ACCESSION
ALS70175
CERVACES
CERVACES
COURCE
Homo sapiens (human)
ORGANISM Homo sapiens

1142 1202 1022 1082 782 842 816 756 962 969 989 576 456 396 /tissue type="PLACENTA COT 25-NORMALIZED"
/clone\_lib="Homo sapiens PLACENTA COT 25-NORMALIZED"
/note="lst strand cDNA was primed with a NotI-oligo(dT)
primer. Five prime end enriched, couble-strand cDNA was
digested with Not I and cloned into the Not I and EcoR v
sites of the pCMVSPORT 6 vector. Library was normalized. 1023 CCCIGIAGCCGGGCAAGCAGGAGCAGGICTCTCTGTGTTCTCTGAGGAACTCAAGI CCAACCTGAGGATTTCTGAAAGGTTCACAGGTTCAATATTTAA-TGCTTCAGAAGCATGT 455 CCAACCTGAGGATTTCTGAAAGGTTCACAGGTTCAATATTAACTGCTTCAGAAGCATGT GGAGACCCATCTCTTGTGCTCCAGACTTCATCACAGGCTGCTTTTTATCAAAAAGGG GIGITGCICCATICCIAGCITGGGAAGCITCCGCITAGAGGICCIGGCCCTCGGCACAG 963 CTGCCACGGGCTCTCCTGGGCTTATGGCCGGTCACAGCCTCAGTGTACTCCACAGTGGC TTGGTTGCCAGAAAATGTGCTTCATTCCCCCTGGTTAATTTTTACACACCCTAGGAAA 1143 CATTTCCAAGATCCTGTGATGGCGAGACAAATGATCCTTAAAGAAGGTGTGGGGGTCTTTC 515 CATTICCAAGAICCTGIGAIGGCGAGACAAAIGAICCTIAAAGAAGGAGGIGIGGGICITIC CATCTGAGCTTTATAAGCGCCCCGGGAGGAACAATGAGCTTGGTGGACACATTTCATTGCA Gaps . 9 47.8%; Score 805.8; DB 9; Length 937; ilarity 93.6%; Pred. No. 2.8e-107; Conservative 26; Mismatches 27; Indels 6 Similarity 860; 1203 875 723 843 815 903 755 1083 Query Match Best Local 8 Best Loca Matches ORIGIN ద d õ S g g 원 ò 셤 ò ò ò ò д ò ò

```
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (Bases 1 to 829)

3 NIH-MGC http://mgc.nci.nih.gov/

3 NIH-MGC http://mgc.nci.nih.gov/

3 NIH-MGC http://mgc.nci.nih.gov/

3 Dupublished (1999)

4 Dupublished (1999)

5 Email: Gapbs-r@mail.nih.gov

7 Fissue Procurement: James Cleaver, M.D.

6 Contact: Robert Strausbrag; Ph.D.

7 Contact: Robert Strausbrag; Ph.D.

8 Email: Gapbs-r@mail.nih.gov

7 Contact: Robert Strausbrag; Ph.D.

8 Contact: Robert Strausbrag; Ph.D.

9 Later Procurement: James Cleaver, M.D.

9 Contact: Robert Strausbrag; Ph.D.

9 Plater Lichal Holody Frow: i column: 16

9 Plate: Lichal Adv. Row: i column: 16
                                                                                                                                                                                                                                                                                                                                      1381 ITCTTTCCCTCACCACAACAGAACATGCAG-TACTAAAGCAATATATTGTGATTCCCCA 1439
1262 GAGGTTCCCAACACTGTCAGCAAAAACCTTAGGAGAAAACTTAAAAATATATAGAATACAT 1321
                                                                                                                                                                     1322 GCGCAATACACAGCTACAGACACAT-TCTGTTGACAAGGGAAAACCTTCAAAGCATGT 1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1440 IGTAATTCTTCAATGTTAAACAGTGCAGTCCTCTTTCGAAAGCTAAGATGACCATGCGCC 1499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1500 CTTTCCTCTGTACATATACCCTTAAGAACGCCCCCTCCACACACTGCCCCCCAGTATATG 1559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1560 CCGCATTGTACTGCTGTTATATGCTATGTACATGTCAGAAACCATTAGCATTGCATGC 1619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BG677521 829 bp mRNA linear EST 01-MAY-2001 602625161F1 NCI_CGAP_Skn4 Homo sapiens cDNA clone IMAGE:4750167 5',
                                                     275 TICITICCCICACACACACAGAACAIGCAGAWACIAAAGCAAIAITITIGIGAITICCCCA 216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  215 reraarrerreargrerraacagrecagrecrerrregaaageraagareareceargeece 156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /mol_type="molico Bapters | //mol_type="molico Bapters | //mol_type="molico Bapters | //mol_type="molico Bapters | //mol_type="molico Bapters | //molico Bapters | //
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             155 CTTTCCTCTGTACATATACCCTTAAAGAACGCCCMYTCCACMCACTGCCCCCCGGYATATA 96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    95 CCGCATTGNACTKCTGTGTTATATGCTATGTACATGTACAGAAACCATTASATTGCATGC 36
                                                                                                                                                                                                                      Score 805.4; DB 12; Length 829;
Pred. No. 3.3e-107;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           High quality sequence stop: 827.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1620 AGGITTCATATTCTA 1638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         35 NGGTTTCNTNTCTTTCTTA 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BG677521.1 GI:13908918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   47.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BG677521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
8 8
                                                                                                                                                            \delta
                                                                                                                                                                                                                          엄
                                                                                                                                                                                                                                                                                                  के वि के
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       90 % 90
90 %
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             \stackrel{\sim}{\sigma}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           È
```

Best Local Similarity

```
7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      954 TCGGCACAGCTGCCACGGGCTCTCCTGGGCTTATGGCCGGTCACAGCCTCAGTGTGACTC 1013
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1014 CACAGTGGCCCTGTAGCCGGGCAAGCAGGAGCAGGTCTCTCTGCATCTGTTCTCTGAGG 1073
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1134 CCTAGGAAACATTTCCAAGATCCTGTGATGGCGAGACAAATGATCCTTAAAGAAGGTGTG 1193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1194 GGGTCTTTCCCCAACCTGAGGATTTCTGAAAGGTTCACGGTTCAATATTTAATGCTTCAG 1253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1074 AACTCAAGTTTGGTTGCCAGAAAATGTGCTTCATTCCCCCCTGGTTAATTTTTACACAC 1133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1254 AAGCATGTGAGGTTCCCAACACTGTCAGCAAAAACCTTAGGAGAAAACTTAAAAATTATA 1313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1314 GAATACATGCGCAATACACAGCTACAGACACATTCTGTTGACAAGGGAAAACCTTCAA 1373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BG679254 NCI_CGAP_SKn4 Homo sapiens cDNA clone IMAGE:4752104 5',
                                         713
                                                                                                                                                     61 TTCCAGATGGGAGACCCATCTCTTGTGCTCCAGACTTCATCACAGCTGCTTTTTATC 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1374 AGCATGTTTCTTTCCCTCACCACAACAGAACATGCAGTACTAAAGCAATATATTGTGAT 1433
                                                                                                                                                                                                                                    834 GTCACTATACATCTGAGCTTTATAAGCGCCCGGGAGGAACAATGAGCTTGGTGGACACAT 893
                                                                                                                                                                                                                                                                                                                                                                                                                          241 Treatracagnericearrecraderredgaagerrecgerragaggreeregegee 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               301 TCGGCACAGCTGCCACGGGCTCTCCTGGGCTTATGGCCGGTCACAGCCTCAGTGTGACTC 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   361 CACAGTGGCCCCTGTAGCCGGGCAAGCAGGAGCAGGTCTCTCTGCATCTGTTCTCTGAGG 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      421 AACTCAAGTTTGGTTGCCAGAAAAATGTGCTTCATTCCCCCCCGGGTTAATTTTTACACAC 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            541 GGGTCTTTCCCAACCTGAGGATTTCTGAAAGGTTCACAGGTTCAATATTTAATGCTTCAG 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               601 AAGCATGTGAGGTTCCCAACACTGTCAGCAAAACCTTAGGAGAAAACTTAAAAATATAT 660
                                                                                                                            714 ȚICCAGAIGGGAGACCCAICTCTCTTGIGCICCAGACTICAICACAGGCIGCTTTTIAIC 773
                                                                                                                                                                                                             774 AAAAAGGGAAAACTCATGCCTTTCCTTTTAAAAATGCTTTTTTGTATTTGTCCATAC 833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      661 GAATACATGCGCAATACACAGCTACAGACACACATTCTGTTGACAAGGGAAAACCTTCAA 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota, Metazoa; Chordata, Craniata, Vertebrata, Euteleostomi, Mammaliai Eutheria, Primates; Catarrhini, Hominidae; Homo.
1 (bases 1 to 844)
NIH-MGC http://mgc.nci.nih.gov/.
                                         181 GTCACTATACATCTGAGCTTTATAAGCGCCCGGGAGGAACAATGAGCTTGGTGGACACAT
                                                                                                                                                                                                                                                                                                                                                                                   894 INCATIGCAGIGITGCICCAINCCIAGCIIGGGAAGCIICCGCIIAGAGGICCIGGCGCC
    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1434 TCCCCATGTAATTCTTCAATGTTAAACAGTGCAGTCCTCTTTCGAAAGCTA 1484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        780 TCCCCATGTTATTCTTCAATGTT-AACAGTGCAGTCCTCTTTCGAAAGCTA 829
  ..
  1; Indels
  0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BG679254.1 GI:13910651
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens (human)
Homo sapiens
Matches 828; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         mRNA sequence.
BG679254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 9
BG679254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AUTHORS
                                         ઠે
                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                            ઠે
                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  જે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
```

1...844

| organism="Homo sapiens" |
| norganism="Homo sapiens" |
| db xref="taxon:9606" |
| clone="IMAGE:4752104" |
| /lab host="PHIOB" (T1 phage=resistant)" |
| /lab host="Organ: Skin; Vector: pCMV-SPORT6; Site\_1: Not1; |
| /lone="Organ: Skin; Vector: pCMV-SPORT6; Site\_1: Not1; |
| Site\_2: Sal1; Cloned unidirectionally. Primer: Oligo dT. Ste\_2: Sal1; Cloned unidirectionally. Primer: Oligo dT. Ste\_2: Sal2: 1.5kb. Library constructed by Life Technologies. Note: this is a NCI\_CGAP Library." 1131 CACCCTAGGAAACATTTCCAAGATCCTGTGATGGCGAGACAAATGATCCTTAAAGAAGGT 1190 1191 GTGGGGTCTTTCCCCAACCTGAGGATTTCTGAAAGGTTCACAGGTTCAATATTTAATGCTT 1250 1251 CAGAAGCATGTGAGGTTCCCAACACTGTCAGAAAACCTTAGGAGAAAAACTTAAAAATA 1310 1311 TATGAATACATGCGCAATACACAGCTACAGACACACATTCTGTTGACAAGGGAAAACCTT 1370 951 GCCTCGGCACAGCTGCCACGGGCTCTCCTGGGCTTATGGCCGGTCACAGCCTCAGTGA 1010 1011 CICCACAGIGGCCCCTGTAGCCGGGCAAGCAGGAGCAGGICTCTCTGCATCTGTTCTCTG 1070 1071 AGGAACTCAAGTTTGGTTGCCAGAAAATGTGCTTCATTCCCCCCCTGGTTAATTTTTACA 1130 540 9 770 241 GCCTCGGCACAGCTGCCACGGGCTCTCCTGGGCTTATGGCCGGTCAGCCTCAGTGTGA 300 421 CACCCTAGGAAACATTTCCAAGATCCTGTGATGGCGAGACAATGATCCTTAAAGAAGGT 480 891 CATITCATIGCAGIGITGCICCATICCIAGCITGGGAAGCITCCGCTTAGAGGICCIGGC 950 ATCAAAAAGGGGAAAACTCATGCCTTTTCCTTTTTAAAAAAGGCGGAAAATTTTTGTCCA 830 61 AICAAAAAAGGGAAAAACTCAIGCCTTTCCITTTTAAAAATGCTTTTTTGTATTTGTATTTGTACT 120 TACGTCACTATACATCTGAGCTTTATAAGCGCCCGGGAGGAACAATGAGCTTGGTGGACA 890 9 Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs=r@mail.nih.gov
Tissue Procurement: James Cleaver, M.D.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LINL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC Clone distribution information can be found through the I.M.A.G.E. Consortium/LINL at:
http://image.lihl.gov
Plate: LibMl0609 row: j column: 09
High quality sequence stop: 839. 481 GTGGGGTCTTTCCCAACCTGAGGATTTCTGAAAGGTTCACAGGTTCAATATTTAATGCTT GGCTTCCAGATGGGAGACCCATCTCTTGTGCTCCAGACTTCATCACAGGCTGCTTTTT 1 GGCTTCCAGATGGGAGACCCATCTCTGTGTCTCCAGACTTCATCACCAGGCTGCTTTTT 5; Gaps Query Match

47.5%; Score 800; DB 12; Length 844;
Best Local Similarity 98.7%; Pred. No. 2e-106;
Matches 838; Conservative 0; Mismatches 6; Indels 711 771 831 FEATURES DRIGIN g 9 셤 g à g ò 엄 ò 8 & d 8 6 8 6 ò  $\delta$ ö

EST:
Home sapiens (human)
Home sapiens
Home sapiens
Home sapiens
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
I (bases 1 to 817)
S NIH-MGC http://mgc.nci.nlh.gov/
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
L Contact: Robert Strausberg, Ph.D.
Email: cgapbs-remail.nih.gov
Tissue Procurement: Dr. James R. Lupski
cDNA Library Preparation: Life I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLAMI3577 row: e column: 11
High quality sequence stop: 587. BQ8B9304 B17 bp mRNA linear EST 16-AUG-2002 AGENCOURT 8482592 Lupski\_dorsal\_root\_ganglion Homo sapiens cDNA clone IMAGE:6185842 5', mRNA sequence. 1431 GATICCCCATCTAATICTICAATGTTAAACAGTGCAGTCCTCTTTCGAAAGCTAAGATGA 1490 CAAAGCATGTTTCTTTCCCTCACCACAACAGAACATGCAGTACTAAAAGCAATATTTGT /organism="Homo sapiens" /mol\_type="mRNA" /db\_xref="taxon:9606" /clone="IMAGE:6185842" BQ889304.1 GI:22281318 EST. 1. .817 1551 CAGTATATG 1559 836 CAGTATATG 844 601 1371 ACCESSION VERSION KEYWORDS SOURCE ORGANISM LOCUS DEFINITION REFERENCE AUTHORS TITLE JOURNAL COMMENT RESULT 10 BQ889304 FEATURES g & 셤 8 8 8 g δ 셤

ô

Gaps

47.3%; Score 796.8; DB 13; Length 817; llarity 98.8%; Pred. No. 5.8e-106; Conservative 0; Mismatches 10; Indels 0;

Query Match Best Local Similarity Matches 801; Conserv

5 G

8 8

8 &

8

8 6 8

8 8 8 g

```
JOURNAL
                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  면
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                            CACAGCCTCAGTGTGACTCCACAGTGGCCCCTGTAGCCGGGCAAGCAGGAGCAGGTCTCT 1054
                                                                                                                                                                                                                                                             CIGCAICTGITCTCTGAGGAACTCAAGTTTGGTTGCCAGAAAATGTGCTTCATTCCCCC 1114
                                                                                                                                                                                                                                                                                                                                              CTGGTTAATTTTTACACACCCTAGGAAACATTTCCAAGATCCTGTGATGGCGAGACAAAT 1174
                                                                                                                                                                                                                                                                                                                                                                                                                               GAICCTTAAAGAAGGIGIGGGGICTTICCCAACCIGAGGATTICTGAAAGGITCACAGGT 1234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1235 TCAATATITAATGCTTCAGAAGCATGTGAGGTTCCCAACACTGTCAGCAAAACCTTAGG 1294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1295 AGAAAACTTAAAAATATATGAATACATGCGCAATACACAGCTACAGACACACATTCTGTT 1354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1355 GACAAGGGAAAACCTTCAAAGCATGTTTCTTTTCCCTCACCACAACAGAACATGCAGTACT 1414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1415 AAAGCAATATATTTGTGATTCCCCATGTAATTCTTCAATGTTAAACAGTGCAGTCCTCTT 1474
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1475 TCGAAAGCTAAGATGACCATGCGCCCTTTCCTCTGTACATATACCCTTAAGAACGCCCCC 1534
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   :535 TCCACACACTGCCCCCCAGTATATGCCGCATTGTACTGCTGTGTTATATGTACAT 1594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BG67700S 794 bp mRNA linear EST 01-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1595 GTCAGAAACCATTAGCATTGCATGCAGGTTTCATATTCTTTGTAAGATGGAAAGTAATAA 1654
                                                                                                                         GCTTAGAGGTCCTGGCGCCTCGGCACAGGTGCCACGGGCTTCTCCTGGGCTTATGGCCGGT 124
                                                                                                                                                                                                                                                                                                                                                                       484
                                                                                                994
                                                                                                                                                                                                                  125 cacadecadordreacrecadadesecentradecesecadecadeadeadeaderer 184
                                                                                                                                                                                                                                                                                                     Crecarcrercreaseaacreaserrescrisceasaaaarerecrearerecee 244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     305 GATCCTTAAGAAGGTGTGGGGTCTTTCCCAACCTGAGGATTTCTGAAAGGTTCACAGGT 364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        rcaararrraargcrrcagaagcargrgaggrrcccaacacrgrcagcaaaaaccrragg 424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       485 GACAAGGGAAAACCTTCAAAGCATGTTTCTTTTCCCTCACCACAACAAGAACATGCAGTACT 544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        545 AAAGCAATATTTTGTGATTCCCCATGTAATTCTTCAATGTTAAACAGTGCAGTCCTCTT 604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          605 TCGAAAGCTAAGATGACCATGCGCCCTTTCCTCTGTACATATACCCTTAAGAACGCCCCC 664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               725 GTCAGAANACATTAGCATTGCCATGCAGGTTTCATATTCTTTCNTAGATGGAAAGNTATAA 784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (Dases 1 to 794)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
             875 ATGAGCTTGGTGGACACATTTCATTGCAGTGTTGCTCCATTCCTAGCTTGGGAAGCTTCC
                                 5 ATGAGCTTGGTGGACACATTTCATTGCAGTGTTGCTCCATTCCTAGCTTGGGAAGCTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    425 AGAAAACTTAAAATATATATAGATACATGCGCAATACACAGCTACAGACACATTCTGTT
                                                                                           935 GCTTAGAGGICCTGGCGCTCGGCACAGCTGCCACGGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1655 AATATATTTGAAATGTAAAAAAAAAAAAA 1685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AATATATTTGAAATGTAAAAAAAAAAAAA 815
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BG677005.1 GI:13908402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  mRNA sequence.
BG677005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EST
                                                                                                                                    65
                                                                                                                                                                            995
                                                                                                                                                                                                                                                             1055
                                                                                                                                                                                                                                                                                                     185
                                                                                                                                                                                                                                                                                                                                              1115
                                                                                                                                                                                                                                                                                                                                                                                    245
                                                                                                                                                                                                                                                                                                                                                                                                                               1175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 11
BG677005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VERSION
KEYWORDS
                                      g
                                                                                       8 B 8
```

```
TCGGCACAGCTGCCACGGGCTCTCCTGGGCTTATGGCCGGTCACAGCCTCAGTGTGACTC 1013
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1014 CACAGTGGCCCCTGTAGCCGGGCAAGCAGGAGCAGGTCTCTCTGCATCTGTTCTCTGAGG 1073
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1074 AACTCAAGTTTGGTTGCCAGAAAAAGTGTGCTTCATTCCCCCCGGTTAATTTTTACACAC 1133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCTAGGAAACATTTCCAAGATCCTGTGATGGCGAGACAAATGATCCTTAAAGAAGGTGTG 1193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1194 GGGTCTTTCCCAACCTGAGGATTTCTGAAAGGTTCACAGGTTCAATATTTAATGCTTCAG 1253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1254 AAGCATGTGAGGTTCCCAACACTGTCAGCAAAAACCTTAGGAGAAAACTTAAAAATATAT 1313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /mol_type="mon" or preserved the carcinoma" // mol_type="mon" or personal carcinoma" // mol_tissue_type="squamous cell carcinoma" // lab.host="hDH10B (T1 phage-resistant)" // lab.host="hDH10B (T1 phage-resistant)" // lone lib="word carcinoma skin, Vector: pcMV-SPORT6; Site_I: NotI; // note="Organ: skin, Vector: pcMV-SPORT6; Site_I: NotI; // site_I: SalI; cloned unidarectionally. Primer: Oligo dT. Average insert size 1.5bb. Library constructed by Life Technologies. Note: this is a NCI_CGAP Library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       773
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ITCAITGCAGIGITGCICCAITCCIAGCITGGGAAGCITCCGCTIAGAGGICCIGGCGCC 953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241 TICATIGCAGIGIIGCICCATICCIAGCIIGGGAAGCIICCGCIIAGAGGICCIGGCGCC 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301 TCGGCACAGCTGCCACGGGCTCTGCTGGGCTTATGGCCGGTCACAGCCTCAGTGTGACTC 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 421 AACTCAAGTTTGGTTGCCAGAAAATGTGCTTCATTCCCCCCCGGTTAATTTTTACACAC 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           541 GGGTCTTTCCCAACCTGAGGATTTCTGAAAGGTTCACAGGTTCAATATTTAATGCTTCAG 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTCACTATACATCTGAGCTTTATAAGCGCCCGGGAAGAACAATGAGCTTGGTGGACACAT 893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9
                   Contact: Robert Strausberg, Ph.D.
Email: cgapbs-rémail.nih.gov
Tissue Procurement: James Cleaver, M.D.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LINL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/Link at:
Found through the I.M.A.G.E. Consortium/Link at:
High quality sequence stop: 787.
Licoation/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   714 TTCCAGATGGGAGACCCATCTCTTGTGCTCCAGACTTCATCACAGGCTGCTTTTTATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTCCAGATGGGAGACCCATCTCTTGTGCTCCAGACTTCATCACAGGCTGCTTTTTATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                774 AAAAAGGGGAAAACTCATGCCTTTCCTTTTAAAAATGCTTTTTTGTATTTGTCCATAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181 Greacharacarcheagchrhanaagceeecegaagaaanaangagchegacacar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             654 GITAIGAAGCACITITIACCAACGGICAGITITIACATITIAIAGCIGCGIGCGAAAAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         361 CACAGTGGCCCCTGTAGCCGGGCAAGCAGGAGCAGGTCTCTCTGTTCTTCTTCTCTGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Τ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 12; Length 794;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
45.1%; Score 759.2; DB 12; Length
Best Local Similarity 98.9%; Pred. No. 1.6e-100;
Matches 775; Conservative 0; Mismatches 8; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="Homo sapiens"
Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            834
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             894
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          954
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1134
```

જે 염 상 Ωp  $\stackrel{>}{\circ}$ 

```
TTT-GTATTTGTCCATACGTCACTATACATCTGAGCTTTATAAGCGCCCGGGAAGAACAA
                  USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Contact: Soares, MB
Coordinated Laboratory for Computational Genomics
University of Iowa
University of Iowa
The State of Iowa City, IA 52242,
Tel: 319 335 8250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Genome Res. 6 (9), 791-806 (1996)
97044477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BU733808.1 GI:23661081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1471 TCTTTCGAAAGCTA 1484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         840 retriceAGAGCTA 853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8889548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1352
                                                                                                                                936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 13
BU733808/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
MEDLINE
PUBMED
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
                                                                                         d
                                                                                                                                                      g
                                                                                                                                                                                     à
                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      P
                                                         8
                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Divaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 860)

NIH-MGC http://mgc.nci.nih.gov/
National Institutes of Health, Mammalian Gene Collection (MGC)

Unpublished (1999)

Contact: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.nih.gov

Contact: Name Colone (astribution information can be found through the I.M.A.G.E. Consortium/LINL at:

Clone distribution: MGC Clone distribution information can be found through the I.M.A.G.E. Consortium/LINL at:

Plate: LLAM10607 row: column: 24

High quality sequence stop: 858.

Location/Qualifiers
                                                                                                                                                                                                                                           860 bp mRNA linear EST 01-MAY-2001
605626339F1 NCI_CGAP_Skn4 Homo sapiens cDNA clone IMAGE:4751327 5',
mRNA sequence.
BG679890
EST.
                                                                                                1334 AGCAIGTITCTTTCCCTCACCACAACAGACATGCAGTACTAAAGCAATATTTGTGAI 1433
720 AGCAIGTTTCTTTCCCCTCACCACAAAAAAACATGCAGTACTAAAAGCAATATATTGTGAI 779
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGCTGCGTGCGAAAGGCTTCCAGATGGGAGACCCATCTCTTGTGCTCCAGACTTCATC 756
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61 AGCTGCGTGCGAAAGGCTTCCAGATGGGAACCCATCTCTCTTGTGCTCCAGACTTCATC 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACAGGCTGCTTTTTATCAAAAAGGGGAAAACTCATGCCTTTCCTTTTTAAAAAATGCTTT 816
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACAGGCTGCTTTTTTATCAAAAAGGGGAAAACTCATGCCTTTCCTTTTTAAAAATGCTTT 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     637 GACACAAATTATATATTGTTATGAAGCACTTTTTACCAACGGTCAGTTTTTACATTTTAT 696
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9
        601 AAGCATGTGAGGTTCCCAACACTGTCAGCAAAAACCTTAGGAGAAAACTTAAAAATAT-T 659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 GACACAAATTATATATATGTATGTTATGAAGCACTTTTTACCAACGGTCAGTTTTAACATTTTAT
                                                       660 GAATACATGCGCAATACACAGCTACAGACACACATTCTGTTGACAGAGAAAACCTTCAA
                                       GAATACATGCGCAATACACAGCTACAGACACACATTCTGTTGACAAGGGAAAACCTTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     7; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity 97.3%; Pred. No. 7.9e-100; Similarity 97.3%; Pred. No. 7.9e-100; St. Indels 7;
                                                                                                                                                                                                                                                                                                                                                             EST.
Homo sapiens (human)
Homo sapiens
                                                                                                                                                                  1434 TCCC 1437
                                                                                                                                                                                                 TCCC 783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Sim:
es 831;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       697
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    757
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121
                                       1314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                           ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                RESULT 12
BG679890
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORIGIN
```

ద ò 8 8

ð

```
1470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BU733808 159 bp mRNA linear EST 09-OCT-2002 UI-E-CKI-aga-d-03-0-UI.sl UI-E-CKI Homo sapiens CDNA clone UI-E-CKI-aga-d-03-0-UI 3', mRNA sequence.
                                                                                                                                                  1055
                                                                                                                                                                                                                             1113
                                                                                                                                                                                                                                                                                                           1173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTIGACAA-GGGAAAACCTTCAAAGCATGTTCTTTCCCTCACCACAAAAGAACATGCAG 1410
                                                                                                                                                                                                                                                                                                                                                                                      1231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1291
                                                                                                                                                                                        420
                                                                                                                                                                                                                                                                   480
                                                                                                                                                                                                                                                                                                                                                540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    720
                                                                                                              360
                                                                                                                                                                                                                                                                                                                                                                                                                              009
                                 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens (human)
Homo sapiens
Eukaryozata, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Eukaryozata; Metazoa; Chordata; Catarrhini; Hominidae; Homo.
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 755)
Bonaldo, M.F., Lemnon, G. and Soares, M.B.
Normalization and subtraction: two approaches to facilitate gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241 TGAGCTTGGTGGACACATTTCATTGCAGTGTTGCTCCATTCCTAGCTTGGGAAGCTTCCG
                                                                                                    301 CTTAGAGGTCCTGGCGCCTCGGCACGGCCACGGGCTCTCCTGGGCTTATGGCCGGTC
                                                                                                                                                    996 ACAGCCTCAGTGTGACTCCACAGTGGCCCCTGTAGCCGGGCAAGCAGGAGCAGGTCTCTC
                                                                                                                                                                                                                                                      1114 CCTGGTTAATTTTTACACACCCTAGGAACATTTCCAAGATCCTGTGATGGCGAGACAAA
                                                                                                                                                                                                                                                                                                                                            481 CCTGGTTAATTTTTACACACCCTAGGAAACATTTCCAAGATCCTGTGATGGCGAGACAAAA
                                                                                                                                                                                                                                                                                                                                                                                        1174 TGATCCTTAA-AGAAGGTGTGGGGTCTTTCCCAACCTGAGGATTTCTGAA-AGGTTCACA
                                                                                                                                                                                                                                                                                                                                                                                                             1292 AGGAGAAAACTTAAAAATATATATACATGCGCAATACACAGCTACAGACACACTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTTAGAGGTCCTTGGCGCCTCGGCACGCGCCTCTCCTGGGCTTAATGGCCGGTC
                                                                                                                                                                           1056 IGGARCIGIRCICIGAGGAACICAAGITIGGITGCCAGAAAA--AIGIGCITCATICCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1232 GGTTCAATATTTAATGCTTCAGAAGCATGTGAGGTTCCCAACACTGTCAGCAAAAACCTT
TGAGCTTGGTGGACACATTTCATTGCAGTGTTGCTCCATTCCTAGCTTGGGAAGCTTCCG
```

1108 1048 TCCCCCCTGGTTAATTTTTACACACCCTAGGAAACATTTCCAAGATCCTGTGATGGCGAG 1168 ACAAATGATCCTTAAAGAAGGTGTGGGGTCTTTCCCAACCTGAGGATTTCTGAAAGGTTC 1228 1229 ACAGGITCAATAITIAATGCITCAGAAGCAIGIGAGGITCCCAACACIGICAGCAAAAAC 1288 s80 rcccccrddraatttttacacccradgaaacatrccaagarccrdtgargagag 1169 유 상 A 8 8 8

20499374

1588 1528 101 41 220 CCTCTTTCGAAAGCTAAGATGACCATGCGCCCTTTCCTCTGTACATATACCCTTAAGAAC GCCCCCTCCACACACTGCCCCCAGTATATGCCGCATTGTACTGCTGTTATATATGCTAT 340 TCTGTTGACAAGGGAAACCTTCAAAGCATGTTTCTTTCCCTCACCACAACAAGAACATGC AGTACTAAAGCAATATTTTGTGATTCCCCATGTAATTCTTCAATGTTAAACAGTGCAGT 280 AGTACTAAAGCAATATATTTGTGATTCCCCATGTAATTCTTCAATGTTAAACAGTGCAGT CCTCTTTCGAAAGCTAAGATGACCATGCGCCCTTTCCTCTGTACATATACCCTTAAGAAC 160 GCCCCTCCACACACACTGCCCCCCAGTATATGCCGCATTGTACTGCTGTGTATATGCTAT 1649 TANTARATATATTTGARATGTARARARARARARA 1685 40 TAATAAAATATTTGAAATGTAAAAAAAAAAAA 4 1409 1469 1529 1589 1349 ACCESSION VERSION KEYWORDS SOURCE ORGANISM LOCUS RESULT 14 AK076112 g  $\delta$ g ઠે a ò g ઠે ò d ò

AK076112

Mus musculus 10, 11 days embryo whole body cDNA, RIKEN full-length enriched library, clone:2810410F08 product:small inducible cytokine subfamily B (Cys-X-Cys), member 14, full insert sequence.

AK076112.1 GI:26345085

HTG; CAP trapper.

Mus musculus (house mouse)

Mus musculus Carninci, P., Shibata, Y., Hayatsu, N., Sugahara, Y., Shibata, K., Itoh, M., Konno, H., Okazaki, Y., Muramatsu, M. and Hayashizaki, Y. Normalization and subtraction of caper rapper-selected cDNAs to prepare full-length cDNA libraries for rapid discovery of new genes Genome Res. 10 (10), 1617-1630 (2000) Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus Carninci, P. and Hayashizaki, Y. High-efficiency full-length cDNA cloning Meth. Enzymol. 303, 19-44 (1999) 9277923 10349636 JOURNAL MEDLINE PUBMED REFERENCE AUTHORS REFERENCE TITLE

Shibbta,K., Itoh,M., Aizawa,K., Nagaoka,S., Sasaki,N., Carninci,P., Konno,H., Akiyama,J., Nishi,K., Kitsunai,T., Tashiro,H., Itoh,M., Sumi,N., Ishii,Y., Nakamura,S., Hazama,M., Nishine,T., Hazada,A., Yamamoto,R., Matsumoto,H., Sakaguchi,S., Ikegami,T., Kashiwagi,K., Pujiwake,S., Inoue,K., Togawa,Y., Izawa,M., Ohara,E., Watahiki,M., Yoneda,Y., Ishikawa,T., Ozawa,K., Tanaka,T., Matsuura,S., Kawai,J., Okazaki,Y., Muramatsu,M., Inoue,Y., Kira, and Haysahizaki,Y. RIKEN integrated sequence analysis (RIGA) system--384-format sequencing pipeline with 384 multicapillary sequencer The RIKEN Genome Exploration Research Group Phase II Team and FANTOM Consortium.
Functional annotation of a full-length mouse cDNA collection Nature 409, 685-690 (2001) 11076861 JOURNAL MEDLINE PUBMED REFERENCE AUTHORS MEDLINE PUBMED REFERENCE AUTHORS JOURNAL

TITLE JOURNAL REFERENCE

CTTAGGAGAAAACTTAAAAATATGAATACATGGGAATACACAGGCTACAGACACACT 1348

1289

Op

460 ACAGGITCAAIAITIAAIGCITCAGAAGCAIGIGAGGITCCCAACACACIGICAGCAAAAAC 401

```
The FANTOM Consortium and the RIKEN Genome Exploration Research Analyses I & II Team.
Analyses of the mouse transcriptome based on functional annotation of 60,710 full-lengus transcriptome based on functional annotation of 60,770 full-lengus cranscriptome based on functional annotation.
In Mature 420, 563-573 (2002)

S Adachi, J., Alzawa, K., Akahira, S., Akimura, T., Aono, H., Arai, A., Arakwa, T., Bono, H., Carninci, P., Fukuda, S., Fukunishi, Y., Hirancka, T., Hori, F., Imcrani, K., Ishii, Y., Itchi, M., Irawa, M., Kasukawa, T., Kato, H., Imcani, K., Ishii, Y., Ronno, H., Kouda, M., Kasukawa, T., Kato, H., Kawa, M., Kasukawa, T., Kato, H., Kawa, M., Kasukawa, T., Kato, H., Kawa, M., Kasukawa, T., Sato, H., Sasaki, D., Saito, H., Saito, R., Sakai, C., Sakai, K., Sano, H., Sasaki, D., Shibata, K., Shibata, M., Taqama, A., Takabahi, F., Tanaka, T., Yoshino, M., Muramatsu, M. and Hayashizaki, Y. Direct Submission

Submitted (16-APR-2002) Yoshinide Hayashizaki, The Institute of Physical and Chemical Research Group, RIKEN Genome Schores Center (GSC), RIKEN Yokohama Institute, 1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama, Vally, Statuka, Sanda, Sa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /tissue type="whole body"
/clone lib="RIKEN full-length enriched mouse cDNA library"
/dev_stage="10, 11 days embryo"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /translation="mrlihaallililalcasrydgskckcsrkgpkirysdykklem
Kryphceekovylytrksmsryrkgcehclhpklostkrfikmynambkrryyee"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cDNA library was prepared and sequenced in Mouse Genome Encyclopedia Project of Genome Exploration Research Group in Riken Genomic Sciences Center and Genome Science Laboratory in RIKEN. Division of Experimental Animal Research in Riken contributed to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      80 GCCGGAAGGCGCCCCCGGGCAGAAAGCCGAGCAGAGCTGGGTGGCGTCTCCGGGCCG 139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /note="unnamed protein product; putative small inducible cytokine subfamily B (Cys-X-Cys), member 4 (MGD[MGI:1888514)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20 GCAGCGCACACACACACCCTGGCCATCCACCGACGCGCACCGGAGCCAGCAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .4e-95;
tes 357; Indels 128; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            42.9%; Score 722.8; DB 11; Length 1665; llarity 71.5%; Pred. No. 2.4e-95; Conservative 0; Mismatches 357; Indels 128;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            prepare mouse tissues.
Please visit our web site for further details.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /mol_type="mRNA"
/gerain="C57BL/G4"
/db_xref="FaNTOM DB:2810410F08"
/db_xref="MG1:1897254"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      URL:http://genome.gsc.riken.go.jp/
URL:http://fantom.gsc.riken.go.jp/.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /proteIn_id="BAC36192.1"
/db_xref="GI:26345086"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               organism="Mus musculus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 db_xref="taxon:10090"
clone="2810410F08"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   'note="putative"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /note="putative"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1643. .1648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local Similarity
Matches 1215; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 polyA_signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        polyA_site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          source
                                                                                                                                                                                                          REFERENCE
AUTHORS
                    AUTHORS
                                                                                                                                                                     JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                          TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ద
```

```
1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1027 GTAGCCGGGCAAGCAGGAGCAGGTCTCTCTGCATCTGTTCTCTGAGGAACTCAAGTTTGG 1086
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1021 dirideaddacaarreddadeaceacericiaearchereceradaddadere-acrera 1079
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1080 Traccadaagacrrcarccadede-----acceedecedeceda 1126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1147 TCCAAGATCCTGTGTGATGGCGAGACAAATGATCCTTAAAGAAGGTGTGGGGGTCTT-TCCCA 1205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          967 CACGGGCTCTCCTGGGCTTATGGCCGGTCACAGCCTCAGTGTGACTCCACAGTGGCCCCT 1026
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1127 CTCATTCCCCTGTCACGACCAGGCAAGTGATCCTTAAAGGAGCTGGGTCTTTTTTCTTGCA 1186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1206 ACCTGAGGATTTCTGAAAGGTTCACAGGTTCAATATTTAATGCTTCAGAAGCATGTGAGAG 1265
                                                                                                                         259
                                                                                                                                                                                  277
                                                                                                                                                                                                                                                  319
                                                                                                                                                                                                                                                                                                            337
                                                                                                                                                                                                                                                                                                                                                                         379
                                                                                                                                                                                                                                                                                                                                                                                                                                     397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              739
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 846
      199
                                                            217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              577
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        740 GIGCICCAGACIICAICACAGGCIGCIIIIII------AICAAAAAAGGGAAAA 786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 847 TGAGCTTTATAAGCGCCCGGGAGGAACAATGAGCTTGGTGGACACATTTCATTGCAGTGT 906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    841 TGAGCTTTATAAGCGCCTGGGAGGAACAGTGAGCATGGTTGAGACCGTTCACAGACTAC 900
                                                                                                                                                                            218 AGCATGAGGCTCCTGGCGGCGCGCTGCTCCTGCTCCTGGCGCTGTGCGCCTCGCGC
                                                                                                                                                                                                                                               260 GIGGACGGGICCAAAIGCAAGIGCICCCGGAAGGGACCCAAGAICCGCIACAGCGACGIG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  500 TAGGGTGAAAAACTCAGAAGGGAAAACTCCAAAACTTGGGAGACTTGGGAGACTTGTGCAAAGGAC
CCGCTCCGACGGCCCAGCGCCCTCCCCATGTCCCTGCTCCCACGCCGCGCCCTCCGGTC
                                                  278 GIGGACGGGICCAAGIGIRAGIGITICCCGGAAGGGGCCCCAAGAICCGGIACAGGACGIG
                                                                                                                                                                                                                                                                                                                                                                            AAGAAGCTGGAAATGAAGCCAAAGTACCCGCACTGCGAGGAGAAGATGGTTATCATCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                     338 AAGAAGCTGGAAATGAAGCCAAAGTACCCACACTGCGAGAGAAGATGGTTATCGTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  458 ACCAAACGCTTCATCAAGTGGTACAATGCCTGGAACGAGAAGCGCAGGGTCTACGAAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 604 CTTTCTCACAAGCATAAG--ACAAATTATATATTGCTATGAAGCTCTTCTTACC-AGGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             901 TGCTCCGCTCCAGGCTTACAAAGCTTCCGCTCAGAAGCCTGGCGGCGCTCTGCGCGCAGCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1087 TTGCCAGAAAATGTGCTTCATTCCCCCCTGGTTAATTTTTACACACCCTAGGAAACATT
                                                                                                                      200 AGCATGAGGCTCCTGGCGGCGCGCTGCTCCTGCTGCTGCTGGCGCTTGTACACCGCGCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCAAGCGCTTCATCAAGTGGTACAACGCCTGGAACGAGAAGCGCAGGGTCTACGAAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           518 hadddiddacdarcarddaaadaaaachchdddddringadadachrcadcadadd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     620 CTTTCTCACAGGCATAAGACACAAATTATATATTGTTATGAAGCACTTTTTACCAACGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              680 CAGITITIACAITITAIAGCIGCGIGCGAAAGGCITCCAGAIGGGAGACCCAÍCTCTCTI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              787 CTCATGCCTTTCCTTTTTAAAAATGCTTTTTTTTTTTGTCCATACGTCACTTACATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       781 crchagccrrrccrrrrahaharahagagarrrrararrrarccharardraccacacarc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    961 CaCaddororococornardacocadadarorocadadorocadadorococor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        578 TTTGCAGATT----AAAATAAAGCCCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    661 CAGITITIACATITIATAGCIGIGIAAAGGCITCCAGAIGIGAGATCCAGCICGCCI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 907 IGCICCATICCIAGCITGGGAAGCTICCGCTIAGAGGICCIGGCGCCTCGGCACAGCIGC
                                                                                                                                                                                                                                                                                                                                                                         320
140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        440
```

6 6 6 6 6

8 8 8 8 8

ઠે

셤

品 格 品 谷

8

40 40 40 40 40 40

δ

8 6 8 6 8 6 8 6 8

```
No. Sapiens (luman)

Bukaryota; Metazca; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria Primates; Catarrhini; Hominidae; Homo.

(Dases 1 to 722)

Radeloffu, Schneider, D. Hennig, S., Neubert, P., Partsch, E., Peters, M., Radeloffu, Schneider, D. and Korn, B.

(Unpublished (2003)

Contact: Ina Rolfs

RZPD Deutsches Ressourcenzentrum fuer Genomforschung GmbH

Im Neuenheimer Feld 580, D-69120 Heidelberg, Germany

RZPDI IMAG998022834.

RZPDLIB; I.M. G.: CDM Clone Collection;

Human UnigeneSet - RZPD3 (RZPDLIB No.972)

http://www.rzpd.de/CloneCards/cgi-

bin/showLib.pl.cgl/response?libNo=972 Contact: Ina Rolfs

RZPD Deutsches Ressourcenzentrum fuer Genomforschung GmbH

Heubnerweg 6, D-14059 Berlin, Germany

Tel: +49 30 32639 111

www.rzpd.de 32639 111

www.rzpd.de 4
1187 AACTGAGGGTTTCTGAAAGGTCCCCTGCTTTGGTAGAAGATGCTTCTGAGGGATCCAAAG 1246
                                                               1266 TTCCCAACACTGTCAGCAAA----AACCTTAGGAGAAAACTTAAAAATATATGAA 1316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BX106404 50ares_fetal_heart_NDHH19W Homo sapiens cDNA clone IMAGP998022824 ; IMAGE:358893, mRNA sequence.
                                                                                                         1247 TCCCCAGCAGTGTGAGAAATGATGCTCGATGTTCGGGAGGACAAGGGAAGATGCAGGAT 1306
                                                                                                                                                                                      1370 TCAAAGCATGTTTCCTTTCCCTCACCACAACATGCAGTACTAAAGCAATATATTTG 1429
                                                                                                                                                                                                                                                                                                                      1430 IGATTCCCCATGTAATTCTTCAATGTTAAACAGTGCAGTCCTCTTTCGAAAGCTAAGATG 1489
                                                                                                                                                                                                                                                                                                                                                                                                        1490 ACCATGCGCCCTTTCCTC----TGTACATATACCCTTAAGAACGCCCCC----- 1534
                                                                                                                                                                                                                                                                                                                                                                                                                                        1463 ATCCTGCGCCCTGCCCTCTCTGTGTACATATTGCCTTCAGTACCCTCCCCCACCCCAT 1522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1535 TCCACACACTGCCCCCCAGTATATGCCGCATTGTACTGCTGTTATATATGTACAT 1594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTCAGAAACCATTAGCATTGCATGCAGGTTTCATATTCTTATCTAAGATG-----GAAAG 1648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1409 -----¢Ććccrcágigaajacgcaaacágcácigrrcicrgagiraggargriagáacg 1462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1523 GCCACACACTGCCCCTCATTAGAGGCCGCACTGTATGGCTGTG-TATCTGCTATGTAAAT 1581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   This close is available royalty-free from RZPD; contact RZPD (close@rzpd.de) for further information. Seq primer: Ml3r, Primer sequence: TTTCACACAGGAAACAGCTATGAC. Location/Qualifiers
                                                                                                                                                  1317 TACATGCGCAATACACAGCTACAGACACATTCTGTTGACAAGGGAA-----AACCT
                                                                                                                                                                                                                                                                           1642 TAATAAATATATTTGAAGT 1661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1649 TAATATATATATATATA 1668
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BX106404.1 GI:27846958
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BX106404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1595
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 15
BX106404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                    ò
                                                                                           g
                                                                                                                                               \stackrel{>}{\circ}
                                                                                                                                                                             ద
                                                                                                                                                                                                                                                               ద
                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                      8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           임
                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ద
```

/organism="Homo sapiens" /mol\_type="mRNA"

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACAGTGGCCCCTGTAGCCGGGCAAGCAGGAGCAGGTCTCTCTGCATCTGTTCTCTGAGGA 1074
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1075 ACTCAAGTTTGGTTGCCAGAAAATGTGCTTCATTCCCCCCCTGGTTAATTTTTACACACC 1134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1255 AGCATGTGAGGTTCCCAACACTGTCAGCAAAAACCTTAGGAGAAAACTTAAAAATATATG 1314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301 TCATTGCAGTGTTGCTCCTTCCTAGCTTGGGAAGCTTCCGCTTAGAGGTCCTGGCGCCT 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  361 CGGCACAGCTGCCACGGGCTCTCCTGGGCTTATGGCCGGTCACAGCCTCAGTGTGACTCC 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121 TCCAGATGGGAGACCCATCTCTTGTGCTCCAGACTTCATCACAGGCTGCTTTTTATCA 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         775 AAAAGGGGAAAACTCATGCCTTTCCTTTTAAAAATGCTTTTTTGTATTGTCCATACG 834
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 181 AAAAGGGGAAAACTCATGCCTTTCCTTTTAAAAATGCTTTTTTGTATTGTCCATACG 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      835 TCACTATACATCTGAGCTTTATAAGCGCCCGGGAGGAACAATGAGCTTGGTGGACACATT 894
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 954
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               421 ACAGTGGCCCTGTAGCCGGGCAAGCAGGAGCAGGTCTCTCTGCATCTGTTCTCTGAGGA 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 AAAAAAAAAAAAAAAAGCCTTTCTTCTCACAGGCATAAGACACAAATTATATTG 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             595 AAAAAAAAAAAAAAAAAAGCCTTTCTTCTCACAGGCATAAGACACAAATTATATATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61 TTATGAAGCACTTTTTACCAACGGTCAGTTTTTACATTTTATAGAGCTGCGGAAAGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            715 TCCAGATGGGAGACCCATCTCTTGTGCTCCAGACTTCACAGGCTGCTTTTTATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCATTGCAGTGTTGCTCCATTCCTAGCTTGGGAAGCTTCCGCTTAGAGGTCCTGGCGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CGGCACAGCTGCCACGGGCTCTCCTGGGCTTATGGCCGGTCACAGCCTCAGTGACTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            481 ACTCAAGTTTGGTTGCCAGAAAATGTGCTTCATTCCCCCCTGGTTAATTTTTACACAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTAGGAAACATTTCCAAGATCCTGTGATGGCGAGACAAATGATCCTTAAAGAAGGTGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         541 CTAGGAAACATTICCAAGATCCTGTGATGGCGAGACAAATGATCCTTAAAGAAGGTGNGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGTCTTTCCCAACCTGAGGATTTCTGAAAGGTTCACAGGTTCAATATTTAATGCTTCAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                601 GGTCTTTCCCAACCTGAGGATTTCTGAAAGGNTCACAGGNTCAATATTAATGCTTCANA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       661 AGCATGNGAGGONTCCCAACACTGNCAGCAAAAACCTTAGGAGAAAACTTAAAAATATATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
42.4%; Score 715; DB 13; Length 722;
Best Local Similarity 99.0%; Pred. No. 4.3e-94;
Matches 715; Conservative 0; Mismatches 7; Indels C
/db xref="taxon:9606"
/clone="IMAGp998022824 ; IMAGE:358893"
/sex="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       955
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1015
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1195
                                                                                                                                                                                                                                                                                                                                                                   ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
```

qq

|| | 721 AA 722

Search completed: April 26, 2004, 08:49:50 Job time : 4605 secs

```
SEQ ID NO 1
LENGTH: 1685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-816-920-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 369, App
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 1, Appli
                                                                                                                                April 26, 2004, 07:33:10; Search time 1852 Seconds (without alignments) 4102.071 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                         1 geggagacaagegeagageg........aatgtaaaaaaaaaaaaa 1685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Published Applications NA:*

1: /cgn2_6/ptodata/2/pubpna/USO7_PUBCOMB.seq:*
2: /cgn2_6/ptodata/2/pubpna/USO7_PUBCOMB.seq:*
3: /cgn2_6/ptodata/2/pubpna/USO6_NEW_PUB.seq:*
4: /cgn2_6/ptodata/2/pubpna/USO6_PUBCOMB.seq:*
5: /cgn2_6/ptodata/2/pubpna/USO6_PUBCOMB.seq:*
6: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
7: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
8: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
9: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
10: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
11: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
11: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
13: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
14: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
15: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
16: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
17: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
16: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
17: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
18: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
19: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
19: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
19: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
19: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
19: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-978-295A-369
US-09-978-192A-369
US-09-99-812A-369
US-09-978-189-369
US-09-978-189-369
US-09-978-585A-369
US-09-978-585A-369
US-09-978-585A-369
US-09-978-369
                                                                                                                                                                                                                                                                                                                                                                                                                                  Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                    2907579 segs, 2254313464 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-816-920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                          - nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                    IDENTITY NUC Gapop 10.0
                                                                                                                                                                                                                      US-09-978-189-369
1685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 %
Query
Match Length DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score
                                                                                                                                                                                                                             Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                         Scoring table:
                                                                                          OM nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Database :
                                                                                                                                                                                                                                                                              Sequence:
                                                                                                                                                                                                                                                                                                                                                                                           Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Result
No.
                                                                                                                                        Run on:
```

App	App	App	App	App	App	App	App	App	App	App	App	App	App	App	App	App	App	App	App	App	App	App	App	App	App	App	App	App	App	App	
369,	369,	S	369,	o	ø	9	9	ø	9	ဖ	36	36	36	36	3	36	3	9	36	w	G	o	o.	യ	369,	φ	o	o	369,	vo	
Sequence	equenc	Seguence	Sequence	Seguence	Sequence	Sequence	Sequence	Seguence	Seguence	Φ	a	ω	Sequence	w	Φ	w	Sequence	Sequence	Sequence	Sequence											
-09-918-585A-36	9-978-423A-3	-09-978-193A-36	-09-999-830A-36	-09-978-757A-36	-09-978-187B-36	-09-978-643A-36	-09-978-375A-36	-09-978-298A-36	-09-978-188A-36	-09-978-681A-36	-09-978-194A-36	-09-999-829A-36	-09-978-299A-36	-09-978-544A-36	-09-978-665A-36	-09-978-802A-36	-10-164-749A-36	-09-999-831A-36	-10-013-917A-36	-09-999-834A-36	-10-162-521A-36	-10-145-016A-36	45-088A-36	-10-145-092A-36	-10-145-129A-36	-10-165-038A-36	-10-165-353A-36	-10-167-600-36	-10-170-481	-10-172-039A-36	
10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	13	13	13	13	13	13	13	13	13	13	13	13	13	13	
α	1685	00)	80	80	8	8	88	88	8	8	00	80	œ	8	98	88	98	88	88	89	89	89	89	89	89	89	89	89	9	9	
100			100.0		100.0				100.0										00		00	00	100.0	00	00	00	100.0	90	90		
α	1685	8	8	00	00	00	60	8	80	80	88	88	88	89	89	89	89	8	89	89	9	9	9	99	39	39	39	39	39	9	
<del>ب</del> ب	1 1	17	1 1	61	20	21	22	23	24	25	26	27	89	50	30	31	32	8	3.6	. C	36	3.7	38	39	40	41	4.2	4	44	45	

## ALIGNMENTS

```
RESULT.

1 Sequence 1, Application US/09816920

5 Sequence 1, Application US/0019118A1

APPLICANT: ROOGAAGA, Addrey

APPLICANT: Millan, Kenneth J.

APPLICANT: Wood, Millan I.

TITLE OF INVENTION: NOVEL POLYPEPTIDES AND NUCLEIC ACIDS ENCODING BOLEKINE

TITLE OF INVENTION: NUMBER: US/09/816,920

CURRENT APPLICATION NUMBER: US 60/064,249

PRIOR PILING DATE: 1998-01-03 2

FRIOR APPLICATION NUMBER: PCT/US99/05028

FRIOR FILING DATE: 1999-03-08

FRIOR FILING DATE: 1999-03-08

FRIOR FILING DATE: 1999-03-08

FRIOR FILING DATE: 1000-02-18

FRIOR APPLICATION NUMBER: PCT/US00/04341

FRIOR APPLICATION NUMBER: PCT/US00/04341

FRIOR APPLICATION NUMBER: PCT/US00/05841

FRIOR APP
```

1 GOGGAGACAGOGCAGAGOGCAGGCACAGACAGCCCTGGGCATCCACCGAGGG 60

א מטמי

٨٥ ٦	a	ò da è	2 d 8	7 A ò	1 <del>8</del> 8	2 8 S	: A ò	G 8 8	G 43	RESULT (US-09-9) Seque:	GENER ; APPL ; APPL	APPL	APPL APPL APPL APPL	APPL	APPL APPL	APPL	APPL
ahchagcgcagagcgcaggcgcgcgcggcgggckgagahagccgggggagg ccggagcchgchgagccggahaggcgcgcgcgggchgagahagccggaggaag	1 CGCAGCCGGGAGCCAGCAGAGCCGCGCCCCGGGCCAGGAAAGCCGAGCAGAGCC 1 GGGTGGCGTCTCCCGGGGCCGCCCCCCCCTCCCCAGGCCTCCCCTCCCT	SCGTCTCCGGGCCGCCGCTCCGGGGCCAGCGCCTTCCCTGTCCCTGGTCCCTGCTCCTGCTCCTGCTCCTGCTG	241 GGGGCTGTACACCGGGGGTGTGGACGGGTCCAATGCAAGTGCTCCCGGAAGGGACCCAA 300 	301 GATCCGCTACAGCCACGTCAAGAAGCTGGAAATGAAGCCAAAGTACCCGCACTGCGAGGA 360 	361 GAAGATTATCATCACCACCAAGAGCGTGTCCAGGTACCGAGGTCACGAGCACTGCCT 420 	421 GCACCCCAAGCTGCAGAGCACCCAAGCGCTTCATCAAGTGGTACAACGCCTGGAACGAGAA 480 	481 GCGCAGGGTCTACGAAGAATAGGGTGAAAAACCTCAGAAGGGAAAACTCCAAACCAGTTG 540 	541 GGAGACTTGTGCAAAGGACTTTGCAGATTAAAAAAAAAA	601 AARARARARAGCTITCITCACAGGCATAAGACAAATTAIAIATGTTATGG 660 	661 AGCACTTTTACCAACGGTCAGTTTTACATTTTATAGCTGCGTGCG	721 IGGGAGACCCATCTCTTGTGCTCCAGACTTCATCACAGGCTGCTTTTTATCAAAAAG 780 	781 GGAAAACTCATGCCTTTCCTTTTAAAAATGCTTTTTGTATTTGTCCATACGTCACTA 840 	841 TACATCTGAGCTTTATAAGCGCCCGGAGGAACAATGAGCTTGGTGGACACATTTCATTG 900 	901 CAGIGITGCICCATICCIAGCITGGGAAGCITCCGCITAGAGGICCIGGCGCCICGGCAC 960	961 AGCTGCCACGGCTCTCCTGGGCTTATGGCCGGTCACGCTCAGTGTGACTCCACAGTG 1020	1021 GCCCCTGTAGCCGGGCAAGCAGGAGCTCTCTGCATCTGTTCTCTGAGGAACTCAA 1080	1081 GTTTGCTTGCCAGAAAATGTGCTTCATTCCCCCTGGTTAATTTTTACACACCCTAGGA 1140 

\$ a \$

원 상 원

ò

g S

ULT 2
9-978-255A-369
quence 369, Application US/09978295A
tent No. US20020156006A1
NBERL INFORMATION:
PELICANT: Ashkenazi, Avi
LPELICANT: Backer Kevin P.
LPELICANT: Becstein, David
LPELICANT: Eaton, Dan
LPELICANT: Eaton, Dan
LPELICANT: Ferrara, Mapoleon
LPELICANT: Ferrara, Mapoleon
LPELICANT: Ferrara, Mapoleon
LPELICANT: Gacher, Hanspeter
LPELICANT: Gacher, Hanstin L.
LPELICANT: Gacher, Mary A.
LPELICANT: Napier, Mary A.
LPELICANT: Napier, Mary A.
LPELICANT: Pan, James;
LPELICANT: Shelton, David L.
LPELICANT: Shelton, David L.
LPELICANT: Steamert, Timothy A.
LPELICANT: Tumas, Daniel
LPELICANT: Williams, P. Mickey

ନ ଞ୍

DP DP

\$ 6 \$ 6 \$

g

 $\stackrel{>}{\circ}$ a

R FILING DATE: 1998-04-01
R APPLICATION NUMBER: 60/080334
R FILING DATE: 1998-04-01
R FILING DATE: 1998-04-08
R PLING DATE: 1998-04-08
R APPLICATION NUMBER: 60/081049 PRIOR

PRIOR FILING DATE: 1998-04-08

PRIOR APPLICATION NUMBER: 60/081195

PRIOR PLING DATE: 1998-04-08

PRIOR PLING DATE: 1998-04-09

PRIOR PLING DATE: 1998-04-10

PRIOR PLING DATE: 1998-04-10

PRIOR PLING DATE: 1998-04-15

PRIOR PLING DATE: 1998-04-22

PRIOR PLING DATE: 1998-04-29

PRIOR PRILOCATION NUMBER: 60/08350

PRIOR PRILOCATION NUMBER: 60/08350

PRIOR PLING DATE: 1998-04-29

PRIOR PLING DATE

ON NUMBER: 60/084627	TE: 1998-05-0	NO	TE: 1998-05-07	N NUMBER: 60	IE: 1998-05-1	ON NUMBER: 60	: 1998-05-1	NUMBER: 60	: 1998-05-1	NUMBER: 60	: 1998-05-1	NUMBER: 60	1998-	NUMBER: 60	: 1998-05-1	NUMBER: 60	E: 1998-05-1	ON NUMBER: 60/085580	TE: 1998-05-15	ON NUMBER: 60/085573	E: 1998-05-1	N NUMBER: 6	8-05-1	ON NUMBER: 60/085697
PPLICATI	ILING DA	PPLICATI	ILING DA	PPLI	ILING DA	PPLICATI	FILING DATE	PPLICA	ILING	PPLICA	ILING	PPLICA	FILING DATE	PLICA	LING	PPLICA	LLING DA	PPLICATI	FILING DAT	PPLICATION	FLING DA	PPLICATI	LING DA	APPLICATION
RIC	RIC	RIC	RIC	RIC	RIC	RIC	띪	RIC	RIC	375	210	22	ZIC.	걾	310	210	210	ZIC.	PRIOR	210	212	ZIC	Sic	PRIOR

Query Match 100.0%; Score 1685; DB 9; Length 1685; Best Local Similarity 100.0%; Pred. No. 0; Matches 1685; Conservative 0; Mismatches 0; Indels 0; Gaps

qq

6	09	2	120	770	180	180	240	240	300	300	360	360	420	420	480	480	540	540	009	009	099	099
Gaps																						
0;	CCAC	1	GAGC	SAGG	CCCTC	CCCTC	TGCTC	HGCTC	AGGG2	AGGG7	ACTGG	ACTG	AGCAC	AGCAC	GGAAC	GGAAG	PAPACO	PAPAC	AAAAA	AAAA.	ATTG	ATTG
0; Indels	GCGGAGACAAGCGCAGAGCGCAGCGCACGGCCACAGACAGCCCTGGGCATCCACGACGG	T	CGCAGCCGGAGCCAGCAGCCGGAAGGCGCCCCGGGGCAGAAAAGCCGAGAGCAGAGCT	GCAGAGAAAGCC	GGGTGGCGTCTCCGGGCCGCTCCGACGGGCCAGCGCCTCCCCATGTCCCTGCTCCC	CCCTCCCCATGI	ACGCCGCGCCCTCCGGTCAGCATGAGGCTCCTGGCGGCGCGCGC	CCCCCTCCTCC	GGCGCTGTACACCGCGCGTGTGGGACGGGTCCAAATGCAAGTGCTCCCGGAAGGGACCCAA	GGCGCTGTACACCGCGCGCGTGTGGACGGGTCCAAATGCAAGTGCTCCCGGAAGGGACCCAA	APTCCGCTACAGCGACGTGAAGCTGGAAATGAAGCCAAAGTACCCGCACTGCGAGGA	GATCCGCTACAGCGACGTGAAGGTTGGAAATGAAGCCAAAGTACCCGCACTGCGAGGA	SANGATGGTTATCATCACCACCAAGGGGTGTCCAGGTACCGAGGTCAGGAACACTGCCT	GAAGATGGTTATCATCACCACCACGTGTGTCCAGGTACCGAGGTCAGGAGCACCTCCCT	GCACCCCAAGCTGCAGAGCACCAAGCGCTTCATCAAGTGGTACAAGGCCTGGAAACGAGAAA	GGTACAACGCCT	GCGCAGGGTCTACGAAAAAAGGGGAAAAACCTCAGAAGGGAAAACCAAACCAGTTG	GGGCAGGGTCTACGAGAATAGGGTGAAAACCTCAGAAGGGAAAACTCCAAACGGTTG	GGAGACTTGTGCAAAGGACTTTGCAGATTAAAAAAAAAA	GAGACTTGTGCAAAGGACTTTGCAGATTAAAAAAAAAAA	AAAAAAAAAAAAAGCCTTTCTCTCACAGGCATAAGACACAAATTATATATGTTATGA	AAAAAAAAAAAAGCCTTTCTTTCTCACAGGCATAAGACACAAATTATATATA
	GGCCACAGAC	700000000000000000000000000000000000000		secential series	ACGGGCCAGCG	CGGGCCAGCG	SCTCCTGGCGG	SCICCIGGCGG	STCCAAATGCA	STCCAAATGCA	GAAATGAAGC	GAAATGAAGC	GTGTCCAGGT	GEGECCAGGE	TTCATCAAGT	TTCATCAAGT	AAAACCTCAGA	AAACCTCAGA	TAAAAAAAA	TAAAAAAAA	AGGCATAAGA	AGGCATAAGA
; Pred. No. 0; 0; Mismatches	CGCAGCGCAC	4,5,5,5,5,5,5	AGCCGGAAGG	AGCCGGGAAGC	GCCGCTCCGA	GCCGCTCCG	CAGCATGAGG	CAGCATGAGG	TGTGGACGG	TGTGGACGG	GAAGAAGCTG	GAAGAAGCTC	CACCAAGAGC	CACCAAGAGC	CACCAAGCGC	CACCAAGCGC	ATAGGGTGAA	ATAGGGTGAA	CTTTGCAGAT	CTTTGCAGAT	TCTTTCTCAC	TCTTTCTCAC
100.0%; vative	AGCGCAGAG 	200000000000000000000000000000000000000	AGCCAGCAG	AGUCAGUAG	CTCCGGGCC	CTCCGGGCC	CCCTCCGGI	CCCTCCGGT	CACCGCGCG	CACCGCGCG	CAGCGACGT	CAGCGACGT	TATCATCAC	TATCATCAC	GCTGCAGAG	GCTGCAGAG	CTACGAAGA	CTACGAAGA	TGCAAAGGA	TGCAAAGGA	AAAAGCCTT	AAAAGCCTT
<pre>imilarity 100 ; Conservative</pre>	GCGGAGACA 	<b>U</b>	CGCAGCCGG	SSC AGC GG	GGGTGGCGT	GGGTGGCGT	ACGCCGCGC	ACGCCGCGC	GGCGCTGTA	GGCGCTGTA	GATCCGCTA	GATCCGCTA	GAAGATGGT	GAAGATGGT	GCACCCCAA	GCACCCCAA	GCGCAGGGT	GCGCAGGGT	GGAGACTTG	GGAGACTTG	AAAAAAAA	AAAAAAAA
est Local Similarity atches 1685; Conserv	н -	1	61	19	121	121	181	181	241	241	301	301	361	361	421	421	481	481	541	541	601	601

& 48	661	AGCACTTTTTACCAACGGTCAGTTTTTACATTTTATAGCTGCGAAAGGCTTCCAGA 720 
ò	721	366A6ACCATCTCTCTTGTGCTCCAGACTTCACAGGCTGCTTTTATCAAAAGG 78
Пр	721	aggagaccentritergreciceagacrreareacagecrecrriteraaaagg 7
Oy Dp	781	GGAAAACTCAIGCCTTTCCTTTTTAAAAATGCTTTTTTGTATTTGTCCTAGGTCACTA 840 
γ̈́ο	841	ACAICTGAGCTTTATAAGCGCCCGGGAGGAACAATGAGCTTGAGGCTCGACACATTTCATTG 90
d d	841	TAAGCGCCCGGGAAGAATGAGCTTGGTGGACACATTTCATTG 90
ර සි	901	CCTAGCTTGGGAAGCTTCCGCTTAGAGGTCCTGGCGC
ò	9	RGCCACGGGGTTTCTTGTGGCCGGTCACAGCCTCAGTGTGACTCCACAGTG 10
; A	6	 AGTG 102
λ̈́o	1021	FCAA 108
QQ	1021	CCCCTGTAGCCGGGCAAGCAGGAGCAGGTCTCTCTGTTCTTCTTGAGGAACTCAA 108
ζŏ	1081	-i
Q Q	1081	TTTGGTTGCCAGAAAATGTGCTTCATTCCCCCCTGGTTAATTTTTACACACCCTAGGA 114
ठे व	1141	TITCCAAGATCCTGTGATGGCGAGACAAATGATCCTTAAAGAAGGTGTGGGGTCTT
an i	d.	.AIIICCAAGAICCIGIGAIGGCGAGACAAAIGAICCIIAAAGAAGGIGIGGGGGICII 120
δõ	1201	9
Ob	1201	cccaaccidaacaiticigaaaggircacaggircaataititaatgciicagaagcaig 12
ò	1261	2
Dp	1261	rgaggricccaacacrgicagcaaaaaccrraggagaaaacrraaaaararararaaaraca 1320
ò	1321	ACAGCTACAGACACACATTCTGTTGACAAGGGAAAACCTTCAAAGCATGT 138
qq	1321	racecharacacacaracacacarrerarrescaadacaracaracaracarar 1380
ò	1381	CITICCCCCACACACAGAACAIGCAGIACIAAAGCAAIAITIGIGAITCCCCAI 144
qq	1381	TICTITICCTCACCACACAGAACAIGCAGIACIAAAGCAAIAIAITIGIGATICCCCAI 1440
ζŏ	4	AATTCTTGAATGTTAAACAGTGCAGTCCTCTTTCGAAAGCTAAGATGACCATGCGCCC 1
qq		TAATICTICAALGITAAACAGIGCAGICCICTITCGAAAGCIAAGAIGACCAIGCGCCC 15
δ	1501	TITICITCIGIACATATACCCITAAGAACGCCCCTCCACACACACTGCCCCCAGIAIAIGC 1560
qq	1501	TICCICIGIALINIA COCTIVAGA COCCCCCCICCA CACACTOCCCCCA CATATATOC 1
δγ	1561	in
qq	1561	igracigeterratatatatatatatatatakan da karangaratakan da karangarangan da karangarangan da karangarangan da kar
ò	1621	CATATTCTTTCTAAGATGGAAAGTAATAAAATATATTTGAAATGTAAAAAA
qq		catattettetaagatggaaagtaataaaatatattgaaate
ò	1681	AAAAA 1685 
qq	1681	AAAA 1685

```
Wespur, 3

Separate Fig. Application UB/09978677

SENENT INTERMEDIATION INTERMEDI
```

```
PRIOR FILING DATE: 1998-03-27

PRIOR APPLICATION NUMBER: 60/07968

PRIOR APPLICATION NUMBER: 60/07928

PRIOR APPLICATION NUMBER: 60/07928

PRIOR FILING DATE: 1998-03-27

PRIOR FILING DATE: 1998-03-27

PRIOR FILING DATE: 1998-03-27

PRIOR FILING DATE: 1998-03-30

PRIOR FILING DATE: 1998-03-30

PRIOR FILING DATE: 1998-03-31

PRIOR PLING DATE: 1998-03-31

PRIOR PLING DATE: 1998-03-31

PRIOR PLING DATE: 1998-03-31

PRIOR APPLICATION NUMBER: 60/080105

PRIOR APPLICATION NUMBER: 60/080105

PRIOR APPLICATION NUMBER: 60/080105

PRIOR APPLICATION NUMBER: 60/080136

PRIOR PLING DATE: 1998-03-31

PRIOR PLING DATE: 1998-04-01

PRIOR APPLICATION NUMBER: 60/080126

PRIOR PLING DATE: 1998-04-01

PRIOR APPLICATION NUMBER: 60/080129

PRIOR APPLICATION NUMBER: 60/080129

PRIOR PLING DATE: 1998-04-01

PRIOR PLING DATE: 1998-04-02

PRIOR PLING DATE: 1998-04-03

PRIOR PLING DATE: 1998
```

us-09-978-189-369.rnpb

	\$ 6 \$ 6 6	CCGCGCCCCTCCGGTCAGCATGAGGCTCCTGGCGGCCGCGCTGCTCCTGCT
	8 8 8	301 GATCCGCTACAGGGGCGTGAAGCTGGAATGAAGCCAAGTACCGGACTGCGAGGAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG
	5 65 G	21 GCACCCCAAGCTGCAGAGCACCAAGCGCTTCATCAAGTGGTACAACGCCTGGAA 21 GCACCCCAAGCTGCAGAGCACCAAGCGCTTCATCAAGTGGTACAACGCCTGGAA 21 GCACCCCAAGCTGCAGAGCACCAAGCGCTTCATCAAGTGGTACAACGCCTGGAA
	ව ර	481 GCGCAGGGTCTACGAAGAATAGGGTGAAAACCTCAGAAGGGAAAACTCCAAACCAGTTC
	çy Dp	AAAA 
	Qy Dp	601 AAAAAAAAAAAAGCCTTTCTCACAGGCATAAGACACAAATTATATATTGTTATGA 
	QY	661 AGCACTTTTTACCAACGGTCAGTTTTTACATTTTATAGCTGCGGGGAAGGCTTCCAGA
	λ <sub>O</sub>	acaggcigcititiaicaa 
	oy Op	781 GGAAACTCATGCCTTTCTAAAAAAGCTTTTTGTATTTGTCCATACGTCACTA 
	λ <sub>O</sub> q <sub>O</sub>	841 TACATCTGAGCTTTATAAGCGCCCGGGAGGAACAATGAGCTTGGTGGACACATTTCATTG
	\$ Q	901 CAGIGITGCICCAITCCTAGCTIGGGAAGCITCCGCTIAGAGGICCTGGGGCCTCGGGAC 
	ठ व	<u>g-g</u>
Length 1685;	8 %	GCCGGGCAAGCAGGAGCAGGTCTCTGCATCTGTTCTCTGAGGAACT
CATCCACGACGG 60	5 B 5	STGCTTCATTCCCCCTGGTTAATTTTTACACT 
CGCAGCCGGAGCCAGCAGAGCCGGAAGGCGCCCCGGGCAGAGAAAGCCGAGAGAGCT 120 	2 A 3	« E
aggragacgrenecgaaccacacrecaacaacaccecececcarareceracacreerece 180 	<b>∂</b> 8	201

P & B & B & B

```
1261 TGAGGTTCCCAACACTGTCAGCAAAACCTTAGGAGAAAACTTAAAAATATATGAATACA 1320
TGAGGTICCCAACACTGTCAGCAAAACCTTAGGAGAAAACTTAAAAAATATATGAATAACA 1320
                                                                                                                                                                                    1321 TGCGCAATACACAGCTACAGACACACATTCTGTTGACAAGGGAAAACCTTCAAAGCATGT 1380
                                                                                                                                                                                                                                                                                1381 TTCTTTCCCTCACCACAACAAGAACATGCAGTACTAAAGCAATATATTTGTGATTCCCCAT 1440
                                                                                                                                                                                                                                                                                                                                                 1381 TrcTrTcccrcaccacaacaacardcagractaaagcaararararararrargaarrccccar 1440
                                                                                                                                                                                                                                                                                                                                                                                                                      1441 GTAATTCTTCAATGTTAAACAGTGCAGTCCTCTTTCGAAAGCTAAGATGACCATGCGCCC 1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1441 GTAATTCTTCAATGTTAAACAGTGCAGTCCTCTTTCGAAAGCTAAGATGACCATGCGCCC 1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1621 GGTTTCATATTCTTTCTAAGATGGAAAGTAATAAAATATTTGAAATGTAAAAAAA 1680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1621 GGTTTCATATTCTTTCTAAGATGGAAAGTAATAAAATATTTGAAATGTAAAAAAA 1680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1501 TITCCTCTGTACATATACCCCTTAAGAACGCCCCCTCCACACACTGCCCCCCAGAATATGC 1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Ferrara Napoleon
APPLICANT: Filvaroff Ellen
APPLICANT: Forg, Sherman
APPLICANT: Gao, Wai-Giang
APPLICANT: Gao, Wai-Ciang
APPLICANT: Gerritsen, Mary E.
APPLICANT: Gedewski, Paul J.
APPLICANT: Godowski, Paul J.
APPLICANT: Godowski, Paul J.
APPLICANT: Grimaldi, J. Christopher
APPLICANT: Grimaldi, J. Christopher
APPLICANT: Grimaldi, J. Christopher
APPLICANT: Kilavin, Ivar J.
APPLICANT: Kao, Sophia S.
APPLICANT: Napier, Mary A.
APPLICANT: Napier, Mary A.
APPLICANT: Pan, James;
APPLICANT: Shalton, David L.
APPLICANT: Scwart, Timothy A.
APPLICANT: Shalton, David L.
APPLICANT: Williams, P. Mickey
APPLICANT: Williams, David L.
APPLICANT: Williams, P. Mickey
APPLICANT: Williams, P. Mickey
APPLICANT: Williams, David E.
APPLICANT: Williams, P. Mickey
APPLICANT: Williams, P. Mickey
APPLICANT: Williams, David E.
APPLICANT: Williams, P. Mickey
APPLICANT: Williams, David E.
APPLICANT: Williams, David E.
APPLICANT: Williams, P. Mickey
APPLICANT: Williams, David E.
APPLICANT: WILLIAMS E.
APPLICANT: Williams, David E.
APPLICANT: Williams, D
                                                                                                                                      1321 TGCGCAATACACAGCTACAGACACACTTCTGTTGACAAGGGAAAACCTTCAAAGCATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 369, Application US/09978192A
Patent No. US20020177553A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Baker Kevin P.
Botstein, David
Desnoyers, Luc
Eaton, Dan
Ferrara, Napoleon
Filvaroff, Ellen
Fong, Sherman
Gao, Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Ashkenazi, Avi
APPLICANT: Baker Kevin P.
APPLICANT: Botstein, David
APPLICANT: Desnoyers, Luc
APPLICANT: Baton, Dan
APPLICANT: Ferrara, Napole
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1681 AAAAA 1685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1681 AAAAA 1685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 4
US-09-978-192A-369
1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1561
                                                         셤
                                                                                                                                                                                               DP
                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ద
                                                                                                                                      ò
                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
```

```
PRIOR APPLICATION NUMBER: 60/064249

PRIOR PLING DATE: 1997-11-21

PRIOR PLING DATE: 1998-03-10

PRIOR PLING DATE: 1998-03-10

PRIOR PLING DATE: 1998-03-11

PRIOR PLING DATE: 1998-03-12

PRIOR PLING DATE: 1998-03-12

PRIOR PLING DATE: 1998-03-12

PRIOR PLING DATE: 1998-03-13

PRIOR PLING DATE: 1998-03-20

PRIOR PLING DATE: 1998-03-30

PRIOR PLING DATE: 1998-03-31

PRIOR PLING DATE: 1998-03-31

PRIOR PLING DATE: 1998-03-31

PRIOR PPLICATION NUMBER: 60/08037

PRIOR PPLING DATE: 1998-04-01

PRIOR PPLING
```

```
PRIOR APPLICATION NUMBER: 60/08155
PRIOR PELICATION NUMBER: 60/08191
PRIOR PILING DATE: 1998-04-15
PRIOR PILING DATE: 1998-04-22
PRIOR PILING DATE: 1998-04-29
PRIOR PILING DATE: 1998-05-06
PRIOR PILING DATE: 1998-05-06
PRIOR PILING DATE: 1998-05-06
PRIOR PILING DATE: 1998-05-07
PRIOR PILING DATE: 1998-05-
```

	0	09	120	180	240	300	360	420	480	540	009	099	720	780
	. 8	00-00 00 00-00	H-H	р <u>~-</u> р		<u>4</u> =4								
	Gap	G G G G	PAGAGCT	CCTGCTCC	CCTGCTGCTGCT	ACCC ACCC	CGAC	0 	CGAC	CAGI	AAAAA        	TTAT	100-1 100-1 100-1	AAAA   
	85;	CCAC	34 	5-5 5-5 5-5	5 5 5 5 5 5	000	ACTG	25 2 2 2 2 2 2 2 2 3	g=gy	AAC 	AAAA      AAAA	111G	gCT BCT	5-F
	16	45	0  0  0  0  0  0  0  0  0  0  0  0  0  0 	161	5 — 5 5 — 5 5 — 5	66. 	00 00 00 00 00 00 00 00 00 00 00 00 00	AGG/ AGG/		7. 	AA-AA	TAT 	AAAC	7117 
	Length Indels	11666 	SAAA 	00-00 00-00 00-00		57—57 57—57 57—57	TACC TACC	3610 	44CG	AAAC	AAAAA   AAAAA	ATTA      \TTA	760g 	3011 
•	Leng		45 – 45 - 46 - 46 - 46 - 46	cerceceargree 	60-60 	71 	AAG HAG	CGA(	TAC	900P	4 - 4 - 4 - 4	0 - 4 - 4	60-60 	
	6 6	<b>5</b> ≕5	cgggcagagaaagccgagcagagc 	0000	0 	0=0 0=0 0=0		GTAC      GTAC	97.00 1.00 1.00 1.00	GAAG      GAAG	AAAAA       	GACA GACA	AGCT	80 
	DB	8=8	0 	CCAG	75-75 	AATG	rgaa   	CCAG	AST SEAST S	8-8 5-5 5-5	AAAA   AAAA	ATAATA	TAT.	24. 24. 24. 24. 24.
	1685; No. 0	CGGCCC 	CGGAGCCAGCAGAGCCGGAAGGCGCGCCCC 	GGTGGCGTCTCCGGGCCGCCGCTCCGACGGGCCAGCCCC 	CTCCGGTCAGCATGAGGCTCCTGGCGGCCGCGCTGCTCCTCCTCGCTGCTGCTCTCCTGGCGCCGC	GGGGCTGTACACCGGGGTGTGGACGGGTCCAAATGCAAGTGCTCCCGGAAGGGACCCAA 	GRICCGCTACAGGGACGTGAAGAGCTGGAAATGAAGCCAAAGTACCGGCACTGCGAGGA 	GRAGATGGTTATCATCACCCCCAAGAGGGTGTCCCAGGTACCGGAGTCAGGAGCACTGCCT 	CACCCAAACTGCAGAGCACCAAGCGCTTCATCAAGTGGTACAACGCCTGGAACGAGAA 	gcgcagggtctacgaagaatagggtgaaaacctcagaagggaaactccaaaccagttg 	ggagacttgtgcaaaggactttgcagattaaaaaaaaaa	araaaaaaaaaagcctttcttctcacaggcataagacacaaattatatattgttatga 	agcacttitiaccaacggicactititiacattitatagcigcgigcgaaaggcitccaga 	rgggagacccatctcttgtgctccagacttcatcacaggctgcttttatcaaaaagg 
		0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 -	00 	GA-CGA	8 	8 - 8 - 8	5-5 8-5	AGCC	0 	GAAA 	GATT CATT	2=2 2=2 2=2	TTAC	CAGA 
5582 5700 5689 5579 5573 5573 5704	SC Pr	cecaececaceco             cecaececacego	000 		CATC	GGA GGA GGA	GAAG	Caad Caad	CAAG	9661    9661	CTTTGCAGATTAAA                CTTTGCAGATTAAA	11111	3777 	2010 
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		0505     0505 	SAGC 	0 		STGT 	GAA 	5 = 5 = 5 = 5	SCAC SCAC	ATA 		F - F	\$£	TGT
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	100.00 100.00	CGCAGA 	60-64 	Ū—Ŭ —Ŭ —Ŭ	9 13 13 13 13 13 13 13 13 13 13 13 13 13	8 - 8 - 8 - 8	8 — 8 — 8 — 9 — 9	ACE HCA	Paga Hga	AAG	AGGA( 		ACG-	5 <u></u> 5
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		ggagacaagcgcagag 	0000 	5 - F		GGCGCTGTACACCG                    GGCGCTGTACACCG	AGCG	ATCA 	5 	TACG	GCAAA       GCAAA	AAAG   	ACC H	ATCT   ATCT
1 19 19 19 19 19 19 19 19 19 19 19 19 19	ity serv	ACAAGO          ACAAGO	7.000 	0.670	ACGCCGCGCCCCC	STAC	CIAC	3GTT	CAAG	361C	GGAGACTTGTG            GGAGACTTGTG	AAAA 	TTT	7000 4000 4000
A TON	ilarity Conserv	CGGAGA        CGGAGA	GGCAGO	GGGTGG(	ğ—ğ	10-10 10 10-10 10 10-10 10 10-10 10 10-10 10 10 10-10 10 10 10 10 10 10	5 – 5 9 – 5 9 – 5	GATC	0 0 0 0 0 0	24-05 	GA-CO	8=-8 8	ACT PACT	GAG!  GAG!
HOO I	sh Simila 85; Co	8 <u>—8</u>	8=8	<u>0—</u> 0	м.—-м				Ø-0					
R FILING DATE: 1998-05-13 R APPLICATION NUMBER: 60/0855 R FILING DATE: 1998-05-15 R FILING DATE: 1998-05-15 R FILING DATE: 1998-05-15 R APPLICATION NUMBER: 60/0855 R APPLICATION NUMBER: 60/0855 R FILING DATE: 1998-05-15 R APPLICATION NUMBER: 60/0855 R APPLICATION NUMBER: 60/0855 R FILING DATE: 1998-05-15 R APPLICATION NUMBER: 60/0855 R APPLICATION NUMBER: 60/0855 R FILING DATE: 1998-05-15 R APPLICATION NUMBER: 60/0855 R APPLICATION NUMBER: 60/0855 R FILING DATE: 1998-05-15 R RILING DATE: 1998-05-15 R RILING DATE: 1998-05-15	122	н н	61	121	181	241	301	361 361	421	481	541	601	661	721
PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR														
RAGE REPORTED TO THE REPORT OF	Query Best 1 Match	٠												
		දි දි	\$ A	8 S	8 S	8 8	S S	& A	Qy Pp	8 8	B &	\$ A	\$ B	S G

Desnoyers, Luc

	100 100 100 100 100 100 100 100 100 100		
18   GGAAAACTCATGCCTTTCTTTTAAAAAATGCTTTTTTGTATTTGTCCATACGTCACTA 840		1 TGAGGTTCCCACACTGTCACAAAACCTTAGGAGAAAACTTAAAATATATGAATACA 132 1 TGAGGTTCCCACACTGTCACCAAAACCTTAGGAGAAAACTTAAAAATATATGAATACA 132 21 TGAGGTTCCCACACACTGTCACAAAACCTTAGGAGAAACTTAAAAATATATGAAATACA 132 21 TGCGCAATACACAGCTACAGACACACATTCTGTTGACAAGGGAAAACCTTCAAAGCATGT 138 21 TGCGCAATACACAGCTACAGACACACATTCTGTTGACAAGGGAAAACCTTCAAAGCATGT 138 21 TGCGCAATACACAGACACACACACACATTCTGTTGACAAGGGAAAACCTTCAAAGCATGT 138 31 TTCTTTCCCTCACCACAACAGAACATGCACATAAAAAAAA	ITTCCTCTGTACATATACCCTTAAGAACGCCCCTCACACACTGCCCCCAGTATATGC
	r o e o e o e o	B & B & B & B & B	6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6

```
APPLICANT Designoyes, Luc
APPLICANT Designoyes, Luc
APPLICANT STARCE RELEASE
APPLICANT Goo, Met-Ciang
APPLICANT Goo, Met-Ciang
APPLICANT Goo, Met-Ciang
APPLICANT Goodward Andrey
APPLICANT Hilliam A Kenneth J
APPLICANT HIJAMAN AND ANDREY
APPLICANT KAJWATH, Kenneth J
APPLICANT KAJWATH, KENNETH
```

Sequence 369, Application US/09999832A Publication No. US20020192706A1 GENERAL INPORMATTON: APPLICANT: Ashkenazi, Avi APPLICANT: Baker Kevin P. APPLICANT: Botstein, David

US-09-999-832A-369

3ER	3-	13-30	18ER: 60/080105 198-03-31	IBER: 60/080107	9 6	9	198-03-31 IBER: 60/080327	- 4	4.0	4-01 60/0803	.4-01 	. 6	60	9	10	60	4-6	60/0819	14-15	60/08181 14-15	60/08 4-15	60	Ψ,	100	1,0	60.7		98-04-22 BER: 60/082700 08-04-33	90	4,	: 1998-04-23 NUMBER: 60/083336	9	60	60	- 6	4-29	4-29	4-29	60/08355 4-29	9
PLICATION	LING DATE PLICATION	LING DATE	LING DATE	PLICATION	PLICATION	PLICATION	PLICATION	PLICATION	LING DATE	LING DATE	ING DATE	PLICATION LING DATE	PLICATION	PLICATION	PLICATION	LING DATE	LING DATE	LING DATE	LING DATE	ING DATE	PLICATION LING DATE	PLICATION	PLICATION	PLICATION	PLICATION	PLICATION	PLICATION	LICATION	LICATION	PLICATION	LICATION	LICATION	LING DATE	LING DATE	LICATION	ING DATE	ING DATE	ING DATE	LICATION	LICATION
RIOR	8 8	8 8	ž č	88	86	(H)	<del>4</del> # #	¥ &	<u> </u>	# 5	(K)	8 8	8 8	2 2	581	¥ K	# #	<b>К</b> К	88	<b>4</b> 8	<b>%</b> %	ጅ ጅ	8	<b>KK K</b>	4 55 5	<b>4 65 1</b>	<b>4 K</b> 5	<b>*</b> # #	<b>E</b> E E	<b>4</b> K I	PRIOR APE	<b>K</b> K I	K K !	<b>4 4 5</b>	<b>4</b> K	<u>ج</u> ۾	<b>K</b> 5	<b>KK</b> !	# K	띥

```
121 GGGTGGCGTCTCCGGGCCGCTCCGACGGGCCAGCGCCCTCCCCATGTCCCTGCTCCC 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 GCGGAGACAAGCGCAGAGCGCAGCGCACGGCCACAGACAGCCCTGGGCATCCACCGACGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 GCGGAGACAAGCGCAGCGCAGCGCCACAGACAGCCTGGGCATCCACGACGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 9; Length 1685;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
100.0%; Score 1685; D
Best Local Similarity 100.0%; Pred. No. 0;
Matches 1685; Conservative 0; Mismatches
PRIOR FILING DATE: 1998-04-29
PRIOR APPLICATION NUMBER: 60/08359
PRIOR FILING DATE: 1998-04-29
PRIOR APPLICATION NUMBER: 60/08342
PRIOR FILING DATE: 1998-04-30
PRIOR PILING DATE: 1998-04-30
PRIOR PILING DATE: 1998-04-30
PRIOR PILING DATE: 1998-05-05
PRIOR PLING DATE: 1998-05-05
PRIOR PILING DATE: 1998-05-06
PRIOR PLING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/084631
PRIOR PILING DATE: 1998-05-07
PRIOR PILING DATE: 1998-05-13
PRIOR APPLICATION NUMBER: 60/08559
PRIOR PILING DATE: 1998-05-15
PRIOR PILING DATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  유
```

PRIOR APPLICATION NUMBER: 60/07161
PRIOR FILING DATE: 1999-03-11
PRIOR PELING DATE: 1999-03-11
PRIOR FLING DATE: 1999-03-13
PRIOR PRIOR DATE: 1999-03-13-03
PRIOR PRIOR DATE: 1999-03-13-03
PRIOR PRIOR DATE: 1999-03-13-03
PRIOR PRIOR DATE: 1999-03-13-03
PRIOR PRIOR DATE: 1999-03-20
PRIOR PRIOR DATE: 1998-03-20
PRIOR PRIOR DATE: 1998-03-27
PRIOR PRIOR DATE: 1998-03-27
PRIOR PRIOR DATE: 1998-03-27
PRIOR PRIOR DATE: 1998-03-20
PRIOR PRIOR DATE: 1998-03-20
PRIOR PRIOR DATE: 1998-03-30
PRIOR PRIOR DATE: 1998-03

PRIOR FILING DATE: 1998-04-15
PRIOR APPLICATION NUMBER: 60/082569
PRIOR PLING DATE: 1998-04-21
PRIOR PLING DATE: 1998-04-21
PRIOR PLING DATE: 1998-04-22
PRIOR PLICATION NUMBER: 60/08204
PRIOR PLING DATE: 1998-04-22
PRIOR PLING DATE: 1998-04-23
PRIOR PLING DATE: 1998-04-29
PRIOR PRIING DATE: 1998-04-29
PRIOR PLING DATE: 1998-05-07
PRIOR PLING DATE: 1998-05-07
PRIOR PRIING DATE: 1998-05-07
PRIOR PRIOR PRIING DATE: 1998-05-07
PRIOR PRIOR PRIING DATE: 1998-05-07
PRIOR PRIOR PRIOR PRIOR PRIO

```
ö
                                                                                                                                                                                                                                                                                                                                                                    360
                                                                                                                                                                                                                                                                                                                                                                                                               420
                                                                                                                                                                                                                                                                                                                                                                                                                                                            480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 900
                                                                                                                                                                                    120
                                                                                                                                                                                                          120
                                                                                                                                                                                                                                180
                                                                                                                                                                                                                                                                            240
                                                                                                                                                                                                                                                                                                 240
                                                                                                                                                                                                                                                                                                                                             300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGAAAACTCATGCCTTTCCTTTTTAAAAATGCTTTTTTGTATTTGTCCATACGTCACTA 840
                                                                                                                                                                                                                                                    180
                                                                                                                                                                                                                                                                                                                        GGCGCTGTACACCGCGCGTGTGGACGGGTCCAAATGCAAGTGCTCCCGGAAGGGACCCAA 300
                                                                                                                                                                                                                                                                                                                                                                                       GATCCGCTACAGCGACGTGAAGCTGGAAATGAAGCCAAAGTACCCGCACTGCGAGGA 360
                                                                                                                                                                                                                                                                                                                                                                                                                                      420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAGIGITIGCICCAITCCTAGCITIGGAAGCTICCGCTTAGAGGICCTGGCGCCTCGGCAC 960
                                                                                                                                       9
                                                                                                                                                            9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGCACTTTTTACCAACGGTCAGTTTTTACATTTTTATAGCTGCGAGAAGGCTTCCAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGAAAACTCATGCCTTTCCTTTTAAAAATGCTTTTTTGTATTTGTCCTTGCTCACTA
                                                                                                                                                                                                                                                                                       GATCCGCTACAGCGACGTGAAGCTGGAAATGAAGCCAAAAGTACCCGCACTGCGAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                           GCACCCCAAGCTGCAGAGCACCAAGCGCTTCATCAAGTGGTACAACGCCTGGAACGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      481 GCGCAGGGTCTACGAAGAATAGGGTGAAAAACCTCAGAAGGGAAAACTCCAAACCAGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAAAAAAAAAAGCCTTTCTTTCTCACAGGCATAAGACACAAATTATATATTATGTTATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGGGAGACCCATCTCTCTTGTGCTCCAGACTTCATCACAGGCTGCTTTTATCAAAAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TACATCTGAGCTTTATAAGCGCCCGGGAGGAACAATGAGCTTGGTGGACACATTTCATTG
                                                                                                                                       GCGGAGACAAGCGCAGAGCGCAAGCGCCACAGACAGCCCTTGGGCATCCACGACGG
                                                                                                                                                            CGCAGCCGGAGCCAGCAGAGCCGGAAAGCGCCCCCGGGCAGAAAAGCCGAGCAGAGCT
                                                                                                                                                                                                                                gegradedercreececcecreceacegeccaececccarececargaececc
                                                                                                                                                                                                                                             421 GCACCCCAAGCTGCAGAGCACCAAGCGCTTCATCAACTGGTACAACGCCTGGAAACGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCGCAGGGTCTACGAAGAATAGGGTGAAAAACCTCAGAAGGGAAAACTCCAAACCAGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGCACTITITACCAACGGTCAGTTTTTACATTTTATAGCTGCGAAAAGGCTTCCAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGGGAGACCCATCTCTTGTGCTCCAGACTTCATCACAGGCTGCTTTTTATCAAAAGG
                                                                                                                 Gaps
                                                                                                                                                                                  CGCAGCCGGAGCCAGAGCCGGAAGGCGCCCCGGGCAGAAAAGCCGAGCAGAGCT
                                                                                                                                                                                                                                                                            ACGCCGCCCCCTCCGGTCAGCATGAGGCTCCTGGCGGCCGCGCTGCTGCTGCTGCTGCTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                GAAGATGGTTATCATCACCACCAAGAGCGTGTCCAGGTACCGAGGTCAGGAGCACTGCCT
                                                                                                                   .
0
                                                                                           DB 10; Length 1685,
                                                                                                                 Indele
                                                                                                                 ö
                                                                                         Query Match 100.0%; Score 1685; Best Local Similarity 100.0%; Pred. No. 0; Matches 1685; Conservative 0; Mismatches
PRIOR APPLICATION NUMBER: 60/085580
PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/085573
PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/085704
PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/085697
                                                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            781
                                                                                                                                                                                                                                                                                                                     241
                                                                                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                                                                                                                           421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     781
                                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                             241
                                                                                                                                                                                                                                                                                                                                                                   301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              901
                                                                                                                                                                                    61
                                                                                                                                                                                                        61
                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                               361
                                                                                                                                                                            8 8
                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                    8 8 8
                                                                                                                                                                                                                                                                                                                                     8 B
                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                          $ B $
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8 6 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 QQ
Qp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5 B 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      අ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               q
                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઇ
                                                                                                                                       8 8
```

096	1020	1080	1140	1200	1260	1320	1380	1440	1500	1560	1620	1680		
TCGGCAC	CACAGTG	AACTCAA         AACTCAA	CCTAGGA           CCTAGGA	GGGTCTT         GGGTCTT	AAGCATG	GAATACA	AGCATGT         AGCATGT	TCCCCAT	TGCGCCC	TATATGO	GCATGCA          GCATGCA	aaaaaaaa            aaaaaaaa		
CAGIGITECTCCATTCCTAGCTTGGGAAGCTTCCGCTTAGAGGTCCTGGCGCCTCGGCAC	AGCTGCCACGGGCTCCTGGGCTTATGGCCGGTCACAGCCTCAGTGTGACTCCACAGTG	GCCCTGTAGCCGGGCAAGCAGGAGCAGTCTCTGCATCTGTTCTCTGAGGAACTCAA 	gittggttgccrgaaaatgtgcttcattccccccggttaatttttacacaccctaga 	aacaiticcaagaiccigtgaiggcgagacaaaigaicctiaaagaagggggggggg	tcccaacetgaggatttctgaaaggttcacaggttcaatatttaatgcttcagaagcatg 	tgaggttcccaacactgtcagcaaaaccttaggagaaaacttaaaaatatatggagaaca 	TGCGCAATACACAGCTACAGACACACATTCTGTTGACAAGGGAAAACCTTCAAAGCATGT 	ttotttocotarcaaaagaacatgcagtactaaagcaatatatttgtgattococat 	TAATTCTTCAATGTTAAACAGTGCAGTCCTCTTTCGAAAGCTAAGATGACCATGCGCCC 	ctgccccagtalatgc 	Cattgeargestatatasgestatgeacatgescatagaaaccattagcattgcatgea 	TGTA 		
	GCCTCAG	ATCTGTT         ATCTGTT	TTAATT	CTTAAAG          CTTAAAG	TATTTAA        TATTTAA	AACTTAA        AACTTAA	AGGGAAA.         AGGGAAA.	CAATATA'         CAATATA'	AAGCTAA(         AAGCTAA	CACACTG	GAAACCA          GAAACCA	atatattigaaa              atatattigaaa		
TCCGCTT	GGTCACA          GGTCACA	TCTCTGC	00000TG	AATGATC	AGGTTCAA         AGGTTCAA	PAGGAGAA         PAGGAGAA	GTTGACA          GTTGACA	ACTAAAG          ACTAAAG	CTTTCGA	CCCTCCA 	CATGTCA          CATGTCA	TAAAATA         TAAAATA		
	TTATGGCC          TTATGGCC	AGCAGGT(         AGCAGGT(	TTCATTC(          TTCATTC(	GCGAGAC!        GCGAGAC!	GGTTCACA            GGTTCACA	AAAACCTI          AAAACCTI	CACATTCT	CATGCAGI          CATGCAGI	GCAGTCCT          GCAGTCCT	AGAACGCC            AGAACGCC	TGCTATGTA          TGCTATGTA	gatggaaagtaa            gatggaagtaa		<b>4</b>
CTAGCTT	CCTGGGC	aagcagg         aagcagg	AATGTGC         AATGTGC	TGTGATG         TGTGATG	TCTGAAA	GTCAGCA           GTCAGCA	ACAGACA	aacagaa        aacagaa	AAACAGT	ACCCTTA         ACCCTTA	GTTATAT         GTTATAT	TAAGATG        TAAGATG		/09978608A 2A1 con m nr er
CTCCATT	caacrci          caacrci	AGCCGGGC           AGCCGGGC	GCCAGAAA          GCCAGAAA	CAAGATCC	TGAGGATT          TGAGGATT	CCAACACT             CCAACACT	ACACAGCT	CTCACCAC          CTCACCAC	rcaargii          rcaargii	STACATAT          STACATAT	CATTGTACTGCTGTGTTA	TATTCTTTCTAA                   TATTCTTTCTAA	35 35	Application US/099 N. US20030045462A1 N. US20030045462A1 N. US20030045462A1 N. US20030045462A1 NECORTECH, David Nesnoyers, Luc Aton, Dan Nerara, Napoleon Nilvaroff, Ellen Ong, Sherman ong, Sherman erritsen, Mary Erritsen, Mary Er
	GCTGCCA 	cccrer          cccrer	TTTGGTT         TTTGGTT	ACATTTC	CCCAACC	GAGGTTC	GCGCAAT	TCTTTCC        TCTTTCC	GTAATTCT'          GTAATTCT'	TITCTCTGTGTACATATACCCTTAAGAACGCCCCCTCGACAC 	თ თ	GTTTCAT	AAAAA 168        AAAAA 168	ISSULT 7 Sequence 369, Application U Publication No. US200300454 GENERAL INFORMATION: APPLICANT: Ashkenazi, Avi APPLICANT: Baker Kevin P. APPLICANT: Beterin, Dan APPLICANT: Beterin, Dan APPLICANT: Ferrara, Mapol APPLICANT: Ferrara, Mapol APPLICANT: Ferrara, Mapol APPLICANT: Ford, Sherman APPLICANT: Ford, Sherman APPLICANT: Gao, Wei-Qiang APPLICANT: Gerber, Hanspe APPLICANT: Gerber, Hanspe APPLICANT: Geritsen, Mar
901 C	961 A 961 A	1021 G	1081 G	1141 A 1141 A	1201 T	1261 T 1261 T	1321 T	1381 T	1441 G	1501 T	1561 C	1621 G 1621 G	1681 A 1681 A	ULT 7  -09-978-608A-  -09-978-608A-  -09-978-608A-  -09-978-608A-  -09-98-608A-  -09-9
ą	g ç	रु व	SP GS	\$ 6 29	e B	ري و م	<i>장</i>	S S	<u>&amp;</u> 43	हे ह	8y 2b	상 음 당	oy . Db	RESULT (Sequency Control of the cont
		÷ 1	-		- H	<b>5</b> H	<u> </u>	0 1	<u> </u>	V 1	<u>.</u>	Ç 1	<b>V</b> 1	

```
APPLICANT: Godowski, Paul J.
APPLICANT: Grimaldi, J. Christopher
APPLICANT: Grimaldi, J. Christopher
APPLICANT: Hillan, Kenneth J.
APPLICANT: Hillan, Kenneth J.
APPLICANT: Hillan, Kenneth J.
APPLICANT: Majer, Mary A.
APPLICANT: Napier, Mary A.
APPLICANT: Pan, James;
APPLICANT: Shelton, David L.
APPLICANT: Shelton, David L.
APPLICANT: Naniams; P. Mickey
APPLICANT: Wood, Williams; P. Mickey
APPLICANT: Mouser: 2010-10-16
ITTLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: P2630F1C22
CURRENT FILING DATE: 2010-10-16
INVENTION: Application removed - See File Wrapper or Palm
SEQ ID NO 369
LEMETH: 1685
LEMETH: 1685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGGTGGCGTCTCCGGGCCGCTCCGACGGGCCCGTCCCCCATGTCCCTGCTCCC 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGCGCTGTACACCGCGCGTGTGGACGGGTCCAAATGCAAGTGCTCCCGGAAGGGACCCAA 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          241 GGCGCTGTACACCGCGCGTGTGGACGGGTCCAAATGCAAGTGCTCCCGGAAGGGACCCAA 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301 GATCCGCTACAGCGACGTGAAGGTGGAATGAAGCCAAAGTACCCGCACTGCGAGGA 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCACCCCAAGCTGCAGAGCACCAAGCGCTTCATCAAGTGGTACAACGCCTGGAACGAGAA 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                421 GCACCCCAAGCTGCAGAGCACCAAGCGCTTCATCAAGTGGTACAACGCCTGGAACGAGA 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCGCAGGGTCTACGAAGAATAGGGTGAAAAACCTCAGAAGGGAAAACTCCAAAACAGTTG 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     481 GCGCAGGGTCTACGAAGAATAGGGTGAAAAACCTCAGAAGGGAAAACTCCAAACCAGTTG 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               601 AAAAAAAAAAAGCCTTTCTTCTCACAGGCATAAGACACAAATTATATATTGTTATGA 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61 CGCAGCCGGAGCCAGCAGAGCCGGAAAGGCGCCCCGGGCAGAGAAGCCGGAGCAGAGCT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121 dedrescercrocesecceccecces acesecces acesecces and executed and executed the second executed and executed the second executed and e
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181 ACGCCGCGCCCCTCCGGTCAGCATGAGGCTCCTGGCGGCCGCGCTGCTCCTGCTGCTGCTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GATCCGCTACAGCGACGTGAAGAAGCTGGAAATGAAGCCCAAAGTACCCCGCACTGCGAGGA 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 361 GAAGATGGTTATCATCACCACCAAGAGCGTGTCCAGGTACCGAGGTCAGGAGCACTGCCT 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      361 GAAGATGGTTATCATCACCACCAGGAGGGTGTCCAGGTACCGAGGTCAGGAGACACTGCCT 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 ecedadadadadececadadececadececadadadadececadecearecadedede 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 GCGGAGACAAGCGCAGAGCGCAGCGCACGGCCACAGACAGCCCTGGGCATCCACCGACGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 100.0%; Score 1685; DB 10; Length 1685; Best Local Similarity 100.0%; Pred. No. 0; Matches 1685; Conservative 0; Mismatches 0; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA
CRGANISM: Homo sapiens
US-09-978-608A-369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8 6 8 6 6 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8 B &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            QQ
```

6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6
---

1681 AAAAA 1685

g

```
APPLICANT: National Manuel Application National Manuel Man
RESULT 8
US-09-978-585A-369
; Sequence 359, Application US/09978585A
; Publication No. US20030049633A1
; GENERAL INFORMATION:
; APPLICANT: Ashkemazi, Avi
; APPLICANT: Baker Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Betstein, David
; APPLICANT: Ferrara, Napoleon
; APPLICANT: Filayaroff, Ellen
; APPLICANT: Filayaroff, Ellen
; APPLICANT: Forgy Sherman
; APPLICANT: Forgy Sherman
; APPLICANT: Gao, Wei-Qiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gerber, Hanspeler
Gerritsen, Mary E.
Goddard, Audrey
Goddard, Audrey
Goddard, Audrey
Grimaldi, J. Christopher
Hillan, Kenneth J
Kijavin, Ivar J
Kujavin, Ivar J
Kujavin, Ivar J
Ruser, Mary S
Napier, Mary S
Paoni, Nicholas F
Paoni, Nicholas F
Roy, Margaret Ann
Shelton, David L
Stewart, Timothy A.
Tumas, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA
GRGANISM: Homo sapiens
US-09-978-585A-369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
APPLICANT:
APPLICANT:
```

```
ö
                                                                                                                                                                                                 121 GGGTGGCGTCTCCGGGCCGCCGCCAACGCCCCCCCATGTCCCTGCTCCC 180
                                                                                                                                                                                                                                                                                                                                                                                                                                 181 ACGCCGCCCCTCCCGGTCAGCATGAGGCTCCTGGCGCCCGCGCTGCTCCTGCTGCTT 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241 GGCGCTGTACACCGCGCGTGTGGACGGGTCCAAATGCAAGTGCTCCCGGAAGGGACCCAA 300
                                                                                                                                                                                                                                               61 CGCAGCCGGAGCCAGCAGAGCCCGGAAGGCGCCCCGGGCAGAAAGCCGAGCAGAGCT 120
                                                                                                                                                                                                                                                                                                 121 GGGTGGCGTCTCCGGGCCGCCGCTCCGACGGGCCAGCGCCCTCCCCATGTCCCTGCTCCC 180
                                                                                                                                                                                                                                                                                                                                                                                                 181 ACGCCCCCCCCCCCCCCCACAGCATCAGCCTCCTGGCGCCGCCCTGCTGCTGCTGCTGCTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241 GCCGCTGTACACCGCGCGTGTGGACGGGTCCAAATGCAAGTGCTCCCGGAAGGGACCCAA 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                301 GATCCGCTACAGCGACGTGAAGAAGCTGGAAATGAAGCCAAAGTACCCGCACTGCGAGGA 360
                                                                                                                                          1 GCGGAGACAAGCGCAGAGCGCACGGCCACAGACAGCCCTGGGCATCCACGACGG 60
                                                                                                  1 GCGGAGACAAGCGCAGAGCGCAACACGCCAACAGACAGCCCTGGGCATCCACCGACGG 60
                                                     0; Gaps
Ouery Match

100.0%; Score 1685; DB 10; Length 1685;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 1685; Conservative 0; Mismatches 0; Indels 0;
                                                                                                                                                                                                 61
                                                                                                                                          g
                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                            d
                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
```

301	
361	1 GAAGATGGTTATCATCACCACCAAGAGCGTGTCCAGGTACCGAGGTCAGGAGCACTGCCT
361	. GAAGATGGTTATCATCACCACCAAGAGCGTGTCCAGGTACCGAGGTCAGGAGCACTGCCT
421	GCACCCCAAGCTGCAGAGCACCAAGCGCTTCATCAAGTGGTACAACGCCTGGAAAACGAGAAA
4.2	. GCACCCCAAGCTGCAGAGCACCAAGCGCTTCATCAAGTGGTACAACGCCCTGGAACGAGAA
483 483	481 GCGAGGTCTACCAAGAATAGGGTGAAAAACCTCAGAAGGGAAAACTCCAAACCAGTTG 
541	. GGAGACTTOTGCAAAGAACTTTACAGATTAAAAAAAAAAA
541	. GGAGACTTGTGCAAAGGACTTTGCAGATTAAAAAAAAAA
601	- AABAAAAAAAAAGCCTTTCTCACAGGCATAAGACACAAATTATATATTGTTATGA
601	. AAAAAAAAAAAAAGCCTTTCTCTCTCACGGCATAAGACACAAATTATATATTGTTATGA
661	AGCACTITITACCAACGGTCAGTTTTACATTTTATAGCTGCGTGCGAAAGGCTTCCAGA
	. MGCACLETE LEACCRACGG CAGE LEE LACALETE LEACGC GCGC GCGC GCGCG CCAGA AGGC CAGC GCG GCG
721	16GGAGACCCATCTCTCTTGTGCTCCAGACTTCATCACAGGCTGCTTTTTATCAAAAAGG
781	GGAAAACTCATGCCTTTTTAAAAAAGGCTTTTTTGTATTTTGTACTCATACGTCACTA
781	. GGAAAACTCATGCCTTTCCTTTTAAAAATGCTTTTTTGTATTTGTATTTGCATACGTCACTA
841	TACATCTGAGCTTTATAAAGCGCCCGGGAAGGAACAATGAGCTTGGTGGACACATTTCATTG
841	TACATCTGAGCTTTATAAGCGCCCCGGGAGGAACAATGAGCTTGGTGGACACATTTCATTG
901	CAGIGITACINGCARACTIGGAAACTICCCCTITAGAGGTCTGGCCCTCGGCAC
901	cadrorrectocarrectadorradosadocrrececrradadorrectodococenedos
961	AGCIGCCACGGGCTCTCCTGGGCTTATCGCCGGTCACAGCCTCAGTGACTCCACAGTG
961	Adcreccacecercrecaecrrarescessers adcreaceces adcreacece adcreacece adcreaces
1021	GCCCCTGTAGCCGGGCAAGCAGGAGCAGGTCTCTCTGCATCTGTTCTCTGAGGAACTCAA
1021	. GCCCCTGTAGCCGGGCAAGCAGGAGCAGGTCTCTGCATCTGTTCTCTGAGGAACTCAA .
1081	GITTGGTTGCCAGAAAAATGTGCTTCATTCCCCCCTGGTTAATTTTTACACACCCTAGGA
4 -	. 上上したかけがかいようになる オード・アン・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・
1141	AACATTTCCAAGATCCTGTGATGATGATCCTTAAAGAAGGTGTGGGGGTCTT
1201	TCCCAACCTGAGGATTTCTGAAAGGTTCACAGGTTCAATATTTAATGCTTCAGAAGGATG
1201	TCCCAACCTGAGGATTTCTGAAAGGTTCACAGGTTCAATATTAATGCTTCAGAAGCATG
1261	TGAGGTTCCCAACACTGTCAGCAAAACCTTAGGAGAAAACTTAAAAATATATGAATACA
1261	TGAGGTTCCCAACACTGTCAGCAAAAACCTTAGGAGAAAACTTAAAAATATATGAATACA
1321	TGCGCAATACACAGCTACAGACACATTCTGTTGACAAGGGAAAACCTTCAAAGCATGT :
1321	. TGCGCAATACACACCTACAGACACATTCTGTTGACAAGGGAAAACCTTCAAAGCATGT .
1381	TTCTTTCCCTCACCACAACAGCAACATGCAGTACTAAAGCAATATATTTGTGATTCCCCAT

1440 1500 1560 1620 1680	
	Polypeptides and Nucleic
TICTITCCCTCACCACAACATGAACATGCAGTACTAAAGCCAATATTTGTGATTCCCCT  GTAATTCTTCCATGTTAAACAGTGCAGTCCTCTTTCGAAAGCTAAGATGACCATGGGCC GTAATTCTTCCATGTTAAACAGTGCAGTCCTCTTTCGAAAGCTAAGATGACCATGGGCC GTAATTCTTCCATCTTAAACAGTCCTCTTTTCGAAAGCTAAGATGACCATATTGC TTTCCTCTTTACATTAAACAGTCCTCTTTTCGAAAGCTAAGATGACCCCCCAGTATATGC TTTCCTCTTTACATATACCCTTAAGAACGCCCCCTCCACACACTGCCCCCCAGTATATGC TTTCCTCTTTACATATACCTTAAGAACGCCCCCTCCACACACA	embrane Same
TTCTTTCCCTCACCACAC GTAATTCTTCAATGTTAAA GTAATTCTTCAATGTTAAC GTAATTCTTCAATGTTAAC TTTCCTCTGTACATATAC CGCATTGTACTGTAC	SGULT 9  Sequence 359, Application US/09978191A  Deblication No. US20030050239A1  GENERAL INFORMATION: APPLICANT: Baker Kevin P. APPLICANT: Baker Kevin P. APPLICANT: Baker Kevin P. APPLICANT: Backer Kevin P. APPLICANT: Backer Kevin P. APPLICANT: Backer Kevin P. APPLICANT: Baton, Dan APPLICANT: Ferrara, Napoleon APPLICANT: Ford, Sherman APPLICANT: Ford, Sherman APPLICANT: Gao, Wei-Qiang APPLICANT: Goodweki, Paul J. APPLICANT: Grimaldi, J. Christopher APPLICANT: Goodweki, Paul J. APPLICANT: Grimaldi, J. Christopher APPLICANT: Goodweki, Paul J. APPLICANT: How, Sophia S. APPLICANT: Wood, Milliam S. APPLICANT: Wood, William J. APPLICANT: Williams, P. Mickey APPLICANT: Williams, P. Mickey APPLICANT: Williams, P. Mickey APPLICANT: Williams, P. Mickey APPLICANT: Wood, William J. TITLE OF INVENTION: Secreted and Transm TITLE OF INVENTION NUMBER: GO/G62260 PRIOR FILING DATE: 1997-11-13 PRIOR PELING DATE: 1997-11-13 PRIOR PELING DATE: 1997-11-13 PRIOR APPLICATION NUMBER: GO/G6364 PRIOR PELING DATE: 1997-11-13
Db       1381         Qy       1441         Qy       1501         Db       1561         Db       1561         Qy       1621         Db       1621         Qy       1621         Db       1621         Db       1621         Db       1681         Db       1681	RESULT 9  US-09-978-191A-369  Sequence 369, Application on US200300 geneRal Information No. US200300 geneRal Information No. US200300 geneRal Information No. US200300 geneRal Information No. Mappilcant; APPLICANT: Baker Kevin APPLICANT: Beaton, Dan APPLICANT: General, Na APPLICANT: Pan, James, APPLICANT: Williams, PAPLICANT: Williams, PAPLICANT: Wood, Williams, PAPLICANT: Wood, Williams, PAPLICANT: Wood, Williams, PAPLICANT: Wood, Williams, PRIOR FILING DATE: 1997 PRIOR FILING DATE: 1997 PRIOR APPLICATION NUMBER PRIOR APPLICATION NUMBER PRIOR APPLICATION NUMBER PRIOR FILING DATE: 1998 PRIOR PRIUNG PAPLICATION NUMBER PRIOR FILING DATE: 1998 PRIOR FILING DATE: 1998 PRIOR PRIUNG PAPLICATION NUMBER PRIOR FILING DATE: 1998 PRIOR FILING PRIOR FILING DATE: 1998 PRIOR FILING PRIOR FILING PRIOR FILING PRIOR FILING

PRIOR FILING DATE: 1998-03-11
PRIOR APPLICATION NUMBER: 60/077641
PRIOR APPLICATION NUMBER: 60/077649
PRIOR PLILING DATE: 1998-03-11
PRIOR APPLICATION NUMBER: 60/07701
PRIOR PLILNG DATE: 1998-03-11
PRIOR PLILNG DATE: 1998-03-11
PRIOR PLILNG DATE: 1998-03-20
PRIOR PLING DATE: 1998-03-20
PRIOR PLILNG DATE: 1998-03-27
PRIOR PLILNG DATE: 1998-03-37
PRIOR PLILNG DATE: 1998-04-01
PRIOR PLILNG DATE: 1998-04-09
PRIOR PRILOR DATE: 1998-04-09
PRIOR PLILNG DATE:

PRIOR APPLICATION NUMBER: 60/082568
PRIOR PRING DATE: 1998-04-21
PRIOR APPLICATION NUMBER: 60/08269
PRIOR PELING DATE: 1998-04-22
PRIOR APPLICATION NUMBER: 60/082704
PRIOR PILING DATE: 1998-04-22
PRIOR PILING DATE: 1998-04-22
PRIOR PELING DATE: 1998-04-23
PRIOR PILING DATE: 1998-04-29
PRIOR PELING DATE: 1998-04-29
PRIOR APPLICATION NUMBER: 60/08359
PRIOR PELING DATE: 1998-04-29
PRIOR APPLICATION NUMBER: 60/08359
PRIOR PELING DATE: 1998-04-29
PRIOR PELING DATE: 1998-05-07
PRIOR PELING DATE: 1998-05-18
PRIOR PELI

ö TACATCTGAGCTTTATAAGGGCCCGGGAGGAACAATGAGCTTGGTGGACACATTTCATTG 900 780 780 840 840 960 480 540 540 600 720 720 120 240 420 420 480 600 99 999 120 180 300 300 360 9 CAGTOTTGCTCCATTCCTAGCTTGGGAAGCTTCCGCTTAGAGGTCCTGGCGCCTCGGCAC GGAAAACTCATGCCTTTCCTTTTAAAAATGCTTTTTTGTATTTTGTCCATACGTCACTA 361 GAAGATGGTTATCATCACCACCAGGGGGGTGTCCAGGTACCGAGGTCAGGAGCACTGCCT GCGCAGGGTCTACGAAGAATAGGGTGAAAAACCTCAGAAGGGAAAACTCCAAACCAGTTG AAAAAAAAAAAAAAGCCTTTCTTCTCACAGGCATAAGACACAAAATAATATATTTTTTATGTTATGA AGCACTITITACCAACGGTCAGITITIACAITITIAIAGCTGCGGAAAGGCTTCCAGA 1 GCGGAGACATGCGCAGAGCGCAGGCCACGACAGACAGCCCTGGGCATCCACCGACGG CGCAGCCGGAGCCAAGAAGCCGGAGCGCCCCCGGGCAGAAAGCCGAAGAGCT 241 GGCGCTGTACACCGCGCGTGTGGACGGGTCCAAATGCAAGTGCTCCCGGAAGGGACCCAA 361 GAAGATGGTTATCATCACCACCAAGAGCGTGTCCAGGTACCGAGGTCAGGAGCACTGCCT GCACCCCAAGCTGCAAGCGCTTCATCAAGTGGTACAAGGGCTGGAAACGCCTGGAACGAGAAA 1 GCGGAGACAAGCGCAAGAGCGCAAGGCGCACAGACAGCCCTGGGCATCCACCGACGG 61 CGCAGCCGGAGCCAGAGAGCCGGAAGGCGCCCCGGGCAGAGAAAGCCGAGCAAAGCT gaereacercrecage concentration and accommendation of the confedence of the confedenc 191 ACGCGCGCCCCTCCGGTCAGCATGAGGCTCCTGGCGCCGCGCTGCTCCTGCTGCTGCT GATCCGCTACAGCGACGTGAAGAAGCTGGAAATGAAGCCAAAAGTACCCGCACTGCGAGGA 241 GGCGCTGTACACCGCGCGTGTGGACGGGTCCAAATGCAAGTGCTCCCGGAAGGGACCCAA Gaps ö 10; Length 1685; Indels . 0 DB Query Match
100.0%; Score 1685;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 1685; Conservative 0; Mismatches PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/085573
PRIOR PLING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/085704
PRIOR APPLICATION NUMBER: 60/085697
PRIOR APPLICATION NUMBER: 60/085697 841 301 61 121 421 481 601 601 199 721 721 781 781 841 901 셤 B ð g ઠે a a ò ద ਨੋ ò g 셤 ઠે g ö 엄 ò 8 8 g & ò ò d ð ò

. CAGTGTTGCTCCATTCCTAGCTTGGGAAGCTTCCGCTTAGAGGTCCTGGCGCCTCGGCAC 960	AGCTGCCACGGGCTCTCCTGGGCTTATGGCCGGTCACAGCCTCAGTGTGACTCCACAGTG 1020	GCCCCTGTAGCCGGGCAAGCAGGAGGAGGTCTCTGCATCTGTTCTCTGAGGAACTCAA 1080	GITTGGTTGCCAGAAAATGTGGTTCATTCCCCCTGGTTAATTTTTACACACCCTAGG 1140 	AACATTTCCAAGATCCTGTGATGGCGAGACAAATGATCCTTAAAGAAGGTGTGGGGTCTT 1200 	TCCCAACCTGAGGATTTCTGAAAGGTTCACAGGTTCAATATTTAATGCTTCAGAAGCATG 1260 	TGAGGITCCCAACACIGTCAGCAAAAACCITAGGAGAAAACTTAAAAATATATGAATACA 1320 	TGGGCAATACACAGGCTACAGACACACATTCTGTTGACAAGGGAAAACCTTCAAAGCATGT 1380 	TICTITCCCTCACCACAACAGAACAIGCAGTACTAAAGCAATATATITGTGATTCCCCAT 1440 	GTAATICITCAAIGITAAACAGIGCAGICCICITITCGAAAGCIAAGAIGACCAIGGGCCC 1500 	TITCCTCTGTACATATACCCTTAAGAACGCCCCTCCACACACTGCCCCCCAGTATATGC 1560 	CGCATTGTACTGCTGTGTTATATGCTATGTAGTCTGAAAACCATTAGCATTGCATGCA	GGTTTCATATTCTTTCTAAGATGGAAAGTAATAAATATATTTGAAATGTAAAAAAA	aaaa 1685  } }  aaaa 1685	WESULT 10  US-09-978-403A-369  Sequence 369, Application US/09978403A  PUBLICACATION NO. UNS20030050240A1  APPLICANT: BARKEN KAVIN P.  APPLICANT: BOTSTEIN, DAVID  APPLICANT: BOTSTEIN, DAVID  APPLICANT: Ferrara, Napoleon  APPLICANT: Ferrara, Napoleon  APPLICANT: Forg. Serman  APPLICANT: Forg. Serman  APPLICANT: Gao, Wai-Qiang  APPLICANT: Gao, Wai-Qiang  APPLICANT: Gaodard, Audrey  APPLICANT: Goddard, Audrey  APPLICANT: Goddwski, Paul J.
901 CA	961 AG    961 AG	021 G 021 G	081 GT 	141 AA     141 AA	201 TC	261 TG 	321 TG    321 TG	381 TT 	441	501 TT    501 TT	561 CG    561 CG	621 GG 	681 AA 	403A-3 369, 1001 NO INFORM NT: AS NT: E NT: E NT: G NT: G NT: G NT: G
QO	yo da	Oy 10	Oy 10	O.Y 11	9y 43	Qy 13	Qy 13	ζ. 13 13 14	Oy 14	Oy 18	Qy 18	Qy 16	Oy 16	RESULT 10 US-09-978-0 Sequence Sequence GENERAL APPLICAL

```
APPLICABLE SET, AND APPLICABLE SET, APPLICABLE
```

Grimaldi, J. Christopher Gurney, Austin L. Hillan, Kenneth J Kljavin, Ivar J. Kuo, Sophia S. Napier, Mary A. Pan, James; Pan, James;

APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:

R FILING DATE: 1998-04-29

R FILING DATE: 1998-04-29

R APPLICATION NUMBER: 60/083554

R APPLICATION NUMBER: 60/083559

R FILING DATE: 1998-04-29

R APPLICATION NUMBER: 60/08350

R APPLICATION NUMBER: 60/08350 R FILING DATE: 1998-03-31

R PAPPLICATION NUMBER: 60/080327

R PILING DATE: 1998-04-01

R APPLICATION NUMBER: 60/080328

R FILING DATE: 1998-04-01

R APPLICATION NUMBER: 60/080333

R FILING DATE: 1998-04-01

R APPLICATION NUMBER: 60/080333

R FILING DATE: 1998-04-01 FILING DATE: 60/081203
APPLICATION NUMBER: 60/081229
FILING DATE: 1000 FILING DATE: 1998-04-01 APPLICATION UNMBER: 60/081070 FILING DATE: 1998-04-08 APPLICATION NUMBER: 60/081049 PILING DATE: 1998-04-08
APPLICATION UNDER: 60/081071
FILING DATE: 1998-04-08
APPLICATION UNMER: 60/081195 FILING DATE: 1998-04-15 APPLICATION NUMBER: 60/081817 FILING DATE: 1998-04-15 FILING DATE: 1998-04-15 APPLICATION NUMBER: 60/081819 FILING DATE: 1998-04-15 APPLICATION NUMBER: 60/081952 FILING DATE: 1998-04-15 FILING DATE: 1998-04-15
APPLICATION NUMBER: 60/082568
APPLICATION NUMBER: 60/082569
APPLICATION NUMBER: 60/082569 FILING DATE: 1998-04-23 APPLICATION UNDBER: 60/083336 FILING DATE: 1998-04-27 APPLICATION NUMBER: 60/083322 FILING DATE: 1998-04-08 APPLICATION NUMBER: 60/081203 APPLICATION NUMBER: 60/081955 APPLICATION NUMBER: 60/081838 APPLICATION NUMBER: 60/082704 FILING DATE: 1998-04-22 APPLICATION NUMBER: 60/082804 FILING DATE: 1998-04-22 APPLICATION NUMBER: 60/082700 FILING DATE: 1998-04-22 APPLICATION NUMBER: 60/082797 FILING DATE: 1998-04-22 APPLICATION NUMBER: 60/082796 FILING DATE: 1998-04-28 APPLICATION NUMBER: 60/083392 FILING DATE: 1998-04-29 FILING DATE: 1998-04-29 APPLICATION NUMBER: 60/083495 FILING DATE: 1998-04-29 APPLICATION NUMBER: 60/083496 FILING DATE: 1938-04-29 APPLICATION NUMBER: 60/083499 FILING DATE: 1998-04-29 FILING DATE: 1998-04-29 APPLICATION NUMBER: 60/083545 FILING DATE: 1998-04-29 FILING DATE: 1998-04-30 APPLICATION NUMBER: 60/084366 FILING DATE: 1998-05-05 APPLICATION NUMBER: 60/084414 1998-04-2 LING DATE: LING DATE: PRIOR PRIOR

121 GGGTGGCGTCTCCGGGCCGCCGCTCCGACGGGCCAGCCCCTCCCCATGTCCCTGCTCCC 180 GGCGCTGTACACCGCGCGTGTGGACGGGTCCAAATGCAAGTGCTCCCGGAAGGGACCCAA 300 241 GGGGCTGTACACCGCGCGCGTGTGGGGGGCCAAATGCAAGTGCTCCCGGAAGGGACCCAA 300 301 GATCCGCTACAGCGACGTGAAGAAGCTGGAAATGAAGCCAAAGTAGCCGCACTGCGAGGA 360 GCACCCCAAGCTGCAGAGCACCAAGCGCTTCATCAAGTGGTACAACGACGTGGAACGAGAA 480 301 GATCCGCTACAGCGACGTGAAGAAGCTGGAAATGAAGCCAAAGTACCCGCACTGCGAGGA 360 1 GCGGAGACAAGCGCAGAGAGCGCAACAGCGCCACAGACAGCCCTGGGCCATCCACCGACGG 1 ecedadacaraccocadaccocacecacacacacacacacacaccorocaccarccacacaca CGCAGCCGGAGCCAGAGACCCGGAAAGCCCCCCCGGGCAGAGAAAGCCGAGCAGAGTT 181 ACGCCGCGCCCCTCCGGTCAGCATGAGGCTCCTGGCGGCCGCGCTGCTCCTGCTGCTGCTGCT 361 GAAGATGGTTATCATCACCACCAAGAGCGTGTCCAGGTACCGAGGTCAGGAGCACTGCCT Gaps DB 10; Length 1685; ö 0; Indels 100.0%; Score 1685; 100.0%; Pred. No. 0; iive 0; Mismatches PRIOR FILING DATE: 1996.05-06
PRIOR PILING DATE: 1998.05-06
PRIOR PILING DATE: 1998.05-07
PRIOR PLING DATE: 1998.05-07
PRIOR APPLICATION NUMBER: 60/084640
PRIOR APPLICATION NUMBER: 60/084640
PRIOR APPLICATION NUMBER: 60/084640
PRIOR PILING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/084643
PRIOR PILING DATE: 1998-05-07
PRIOR PILING DATE: 1998-05-13
PRIOR PILING DATE: 1998-05-15
PRIOR PILING DATE: 1998-05-15 FILING DATE: 1998-05-06 APPLICATION NUMBER: 60/084441 FILING DATE: 1998-05-06 APPLICATION NUMBER: 60/084637 Best Local Similarity 100,0 Matches 1685, Conservative 421 61 Query Match Best Local S 241 셤 a g g 심 8 ઠે à 셤 ò ઠે ò ò ò

ö

420

240 240

8 8

QY         1561 CGCATTGTACTGCTGTGTATATGCTATGTACATGTCAGAAACCATTAGCATTGCATGCA	RESULT 11 US-09-978-564A-369 i Sequence 369, Application US/09978564A ; Publication No. US20030050241A1 ; GENERAL INFORMATION:		APPLICANT: Kljavin, Ivar J. APPLICANT: Mo, Sophia S. APPLICANT: Mapier, Mary A. APPLICANT: Pan, James APPLICANT: Pan, James APPLICANT: Pan, James APPLICANT: Booi, Micholas F. APPLICANT: Roy, Margaret Ann APPLICANT: Shelton, David L. APPLICANT: Stewart, Timothy A. APPLICANT: Tumas, Daniel APPLICANT: Williams, P. Mickey	APPLICANT: Wood, William I.  TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Mucleic  TITLE OF INVENTION: Acids Encoding the Same FILE REPERENCE: P5630PLC25  CURRENT APPLICATION NUMBER: U5/09/978,564A  CURRENT FILING DATE: 2001-10-16  PRIOR APPLICATION NUMBER: 09/918865  PRIOR APPLICATION NUMBER: 09/918865  PRIOR APPLICATION NUMBER: 06/062250	PRIOR FILING DATE: 1997-10-17  ; PRIOR APPLICATION NUMBER: 60/064249  ; PRIOR FILING DATE: 1997-11-03  ; PRIOR FILING DATE: 1997-11-13  ; PRIOR FILING DATE: 1997-11-13  ; PRIOR FILING DATE: 1997-11-21  ; PRIOR FILING DATE: 1997-11-21  ; PRIOR FILING DATE: 1998-03-10  ; PRIOR FILING DATE: 1998-03-10  ; PRIOR FILING DATE: 1998-03-11	PRIOR APPLICATION NUMBER: 60/077641 PRIOR FILING DATE: 1998-03-11 PRIOR FILING DATE: 1998-03-11 PRIOR FILING DATE: 1998-03-12 PRIOR FILING DATE: 1998-03-12 PRIOR FILING DATE: 1998-03-12 PRIOR FILING DATE: 1998-03-13 PRIOR FILING DATE: 1998-03-13
421 GCACCCCAAGCTGCAAGCACCAAGCGCTTCATCAAGTGGTACAACGCTGGAACGAAAA 480 481 GCGCAGGGTCTACGAAAAAAAAAAAAAAAAAAAAAAAAA		TACATCTGAGCTTTATAAGCGCCCGGAGGAACAATGAGCTTGGTGGACATTTCATTG THIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	AGCTGCCACGGGCTCTCCTGGGCTTATGGCCGGTCACAGCCTCAGTGTGACTCCCACAGTG GCCCCTGTAGCCGGGCTAACGCCGGTCACACACCTCTCTGAGTGTGACTCCACAGTG	ACCITICCAACAICCIGAIGGGGGGGGGGGGGGGGGGGGG	1261 TGAGGTTCCCAACACTGTCAGCAAAAACCTTAGGAGAAACTTAAAAATATATGAATACA 1320  1261 TGAGGTTCCCAACACTGTCAGCAAAACCTTAGGAGAAAACTTAAAAATATGAATACA 1320  1321 TGCGCAATACACACTACAGCAACATCTGTTGACAAGGGAAAACCTTCAAAGCATGT 1380  1321 TGCGCAATACACAGCTACAGACACATTCTGTTGACAAGGGAAAACCTTCAAAGCATGT 1380  1321 TGCGCAATACACAGCTACAGACACATTCTGTTGACAAGGGAAAACCTTCAAAGCATGT 1380  1381 TTCTTTCCCTCACCACAACAGCAACATGCAGTACTAAAGCAATATTTGTGATTCCCCAT 1400	GCGCCC GCGCCC GCGCCC ATATGC ATATGC

NUMBER: 6 1998-03-1 1998-03-1 NUMBER: 6 1998-03-1 NUMBER: 6 NUMBER: 6 1998-03-1 1998-03-1 1998-03-1 1998-03-1 1998-03-1	1998-03-27  NUMBER: 60/07966, NUMBER: 60/07978  1998-03-27  NUMBER: 60/07978  1998-03-30  NUMBER: 60/07992  NUMBER: 60/08010  1998-03-31  NUMBER: 60/08010  1998-04-01  NUMBER: 60/08032  NUMBER: 60/08032  1998-04-01  NUMBER: 60/08033  1998-04-01	1998-04 1998-04
PLICATION LING DATE: PLICATION LING DATE: LING DATE: PLICATION LING DATE: PLICATION LING DATE: PLICATION LING DATE: LING	ATION	APPLIANCE DATE PAPELIONION DATE PAPELICATION
		PRIOR

PRIOR FILING DATE: 1998-04-29
PRIOR PLING DATE: 1998-04-29
PRIOR APPLICATION WUMBER: 60/0835-8
PRIOR PLING DATE: 1998-04-29
PRIOR APPLICATION WUMBER: 60/0835-8
PRIOR PLING DATE: 1998-04-29
PRIOR PLING DATE: 1998-05-06
PRIOR APPLICATION WUMBER: 60/08441
PRIOR APPLICATION WUMBER: 60/08441
PRIOR APPLICATION WUMBER: 60/08441
PRIOR PLING DATE: 1998-05-07
PRIOR PLING

DB 10; Length 1685;

100.0%; Score 1685; 100.0%; Pred. No. 0;

Query Match Best Local Similarity

APPLICANT: ENEATY, TIMENTY A.
APPLICANT: Trunch by A.
APPLICANT: Williams, P. Mickey
APPLICANT: World A. Milliams, P. Mickey
APPLICANT: World A. Milliams, P. Mickey
APPLICANT: World A. Milliams, P. Milliams, P.

OR FILING DATE: 1998-04-01

OR APPLICATION NUMBER: 60/081070

OR APPLICATION NUMBER: 60/081049

OR APPLICATION NUMBER: 60/081071

OR FILING DATE: 1998-04-08

OR APPLICATION NUMBER: 60/081195

OR APPLICATION NUMBER: 60/081203

OR APPLICATION NUMBER: 60/081229

OR APPLICATION NUMBER: 60/081229

OR APPLICATION NUMBER: 60/081229

OR APPLICATION NUMBER: 60/081229

OR FILING DATE: 1998-04-05

OR APPLICATION NUMBER: 60/081955

OR FILING DATE: 1998-04-15

OR APPLICATION NUMBER: 60/081817

OR APPLICATION NUMBER: 60/081818

OR APPLICATION NUMBER: 60/081955

OR PILING DATE: 1998-04-15

OR APPLICATION NUMBER: 60/08138

OR APPLICATION NUMBER: 60/08204

OR PILING DATE: 1998-04-22

OR PILING DATE: 1998-04-22 PRILICAR PRI

R APPLICATION NUMBER: 60/084366
R FILING DATE: 1998-05-05
R APPLICATION NUMBER: 60/084414
R FILING DATE: 1998-05-06
R APPLICATION NUMBER: 60/08441
R FILING DATE: 1998-05-06

R APPLICATION NUMBER: 60/084637 R FILING DATE: 1998-05-07 R APPLICATION NUMBER: 60/084639 R FILING DATE: 1998-05-07 R APPLICATION NUMBER: 60/084640 R FILING DATE: 1998-05-07

601	ataagac         ataagac
661	CGGTCAGTTTTTACATTTTATAGTGCGGGGGGGGGGGGG
721	THECTCCAGACTTCATCACAGGCTGCTTTTTATCAAAAAGG 78
781	CTTTCCT
841	SGGAGGAACAATGAGCTTGGTGGACACAITTCAITG 90
901	STGTTGCTCCATTCCTAGCTTGGGAAGCTTCCGCTTAGAGGTCCTGGCGCCTCGGCAC 96
961	CACGAGCTCTCCTGGGCTTATGGCCGGTCACAGCCTCAGTGTGACTCCACAGTG 102
1021	GTAGCCGGGCAAGCAGGAGCAGGTCTCTGCATCTGTTCTCTGAGGAACTCAA 10
1081	TIGGTIGCCAGAAAAUGIGCTICATICCCCCGGGGTAATTTTTACACACCCTAGGA 114
1141	TTCCAAGATCCTGTGATGGCGAGACAAATGATCCTTAAAGAAGGTGTGGGGTCTT 12
	IGAAAGGITCACAGGITCAAIAITIAAIGCITCAGAAGCAIG 126
	AGGITCCCAACACTGTCAGCAAAAACCTTAGGAGAAAACTTAAAAATATATGAATACA 13 
1321	GGGCAATACACAGGCTACAGACACACATTCTGTTGACAAGGGAAAACCTTCAAAGCATGT 138 
1381	CTTTCCCTCACCACACAGAACATGCAGTACTAAAGGAATATATTGTGATTCCCCAT 144
1441	ANTICITICAANGITAAACAGIGCAGICCICITITICGAAAGCTAAGATGACCATGGGCCC 15
1501	TTCCTCTGTACATATACCCTTAAGAAGGCCCCTCCACACTGCCCCCGGTATATGC 156
1561	CATTGTACTGCTGTGTTATATGCTATGTACATGTCAGAAACCATTAGCATTGCATGCA
1621	stticataticttictaagaiggaaagtaataaaatatatitgaaatgtaaaaaa 168 

```
1681 AAAA 1685
|||||
1681 AAAA 1685
```

P

PRIOR FILING DATE: 1998-03-26
PRIOR APPLICATION NUMBER: 60/07664
PRIOR APPLICATION NUMBER: 60/07664
PRIOR APPLICATION NUMBER: 60/07969
PRIOR APPLICATION NUMBER: 60/07969
PRIOR APPLICATION NUMBER: 60/07969
PRIOR PILING DATE: 1998-03-27
PRIOR FILING DATE: 1998-03-30
PRIOR PLING DATE: 1998-03-31
PRIOR PLING DATE: 1998-04-01
PRIOR PLING DATE: 1998-04-02
PRIOR PLING DATE: 1998-04-02
PRIOR PLING DATE: 1998-04-02
PRIOR PLING DATE: 1998-04-05
PRIOR PLING DATE: 1998-04-05
PRIOR PLING DATE: 1998-04-05
PRIOR PLING DATE: 1998-04-15
PRIOR PLING DATE: 1998-04-22
PRIOR PR

```
CURRENT FILING DATE:
                   1201 TCCCAACCTGAGGATTTCTGAAAGGTTCACAGGTTCAATATTTAATGCTTCAGAAGCATG 1260
                                                                                    TGAGGTTCCCAACACTGTCAGCAAAACCTTAGGAGAAAACTTAAAAATATATGAATACA 1320
                                                                                                                      1380
                                                                                                                                                   1380
                                                                                                                                                                                1440
                                                                                                                                                                                                                                         1500
                                                                                                                                                                                                                                                                                                                                                               1620
                                                           TGAGGTTCCCAACACTGTCAGCAAAAACCTTAGGAGAAAACTTAAAAATATATGAATACA 1320
                                                                                                                                                                                                             1440
                                                                                                                                                                                                                                                            TITICATCITGIACATATACCCTTAAGAACGCCCCCTCCACACACACCCCCCCAGTATATGC 1560
                                                                                                                                                                                                                                                                                                                        TCCCAACCTGAGGATTTCTGAAAGGTTCACAGGTTCAATATTTAATGCTTCAGAAGCATG 1260
                                                                                                                                                                                                                                                                                                                                                                                                                      1680
                                                                                                                                        1321 TGCGCAATACACAGCTACAGCACACACATCTGTTGACAAGGGAAAACCTTCAAAGCATGT
                                                                                                                                                                              TTCTTTCCCTCACCACACAGAACATGCAGTACTAAAGCAATATATTTGTGATTCCCCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                           TGCGCAATACACAGCTACAGACACACATTCTGTTGACAAGGGAAAACCTTCAAAGCATGT
                                                                                                                                                                                                          1381 TICTTICCCICACACACACATGCAGTACTAAAGCAATATATTTGTGATTCCCCAT
                                                                                                                                                                                                                                         1441 GTAATTCTTCAATGTTAAACAGTGCAGTCCTCTTTCGAAAGCTAAGATGACCATGCGCCC
                                                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic TITLE OF INVENTION: Acids Encoding the Same FILE REFERENCE: P2630P1C14 CURRENT APPLICATION NUMBER: US/09/978,824
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ferrara, Napoleon
Filvaroff, Ellen
Fong, Sherman
Gao, Wel-Qiang
Gerber, Hanspeter
Geritsen, Mary E.
Goddard, Audrey
Godowski, Paul J.
Grimaldi, J. Christopher
Gurney, Austin L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 369, Application US/09978824 Publication No. US20030055216A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Kljavin, Ivar J.
Kljavin, Ivar J.
Kuo, Sophia S.
Napier, Mary A.
Paoni, Nicholas F.
Roy, Margaret Ann
Shelton, David L.
Stewart, Timothy A.
Tumas, Daniel Williams, P. Mickey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Ashkenazi, Avi
APPLICANT: Baker Kevin P
APPLICANT: Botstein, David
APPLICANT: Desnoyers, Luc
APPLICANT: Baton, Dan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAAAA 1685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1681 AAAAA 1685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 14
US-09-978-824-369
                                                                                       1261
                                                                                                                  1321
                                                                                                                                                                                                                                                                                                 1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
APPLICANT:
APPLICANT:
                                                           1261
                                                                                                                                                                              1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1681
                                                                                                                                                                                                                                                                                                                                                             1561
                      g
                                                                                                                                                                                                                                                                                                                                                                                      d
                                                        à
                                                                                g
                                                                                                          ò
                                                                                                                                           g
                                                                                                                                                                                                  a
                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                요
                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                    à
```

```
PRIOR FILING DATE: 2001-07-30
PRIOR FILING DATE: 2001-07-30
PRIOR FILING DATE: 1997-11-01
PRIOR APPLICATION NUMBER: 60/06429
PRIOR APPLICATION NUMBER: 60/065311
PRIOR APPLICATION NUMBER: 60/065311
PRIOR PLING DATE: 1997-11-03
PRIOR PLING DATE: 1997-11-03
PRIOR PLING DATE: 1997-11-03
PRIOR PLING DATE: 1997-11-03
PRIOR PLING DATE: 1997-10-17
PRIOR APPLICATION NUMBER: 60/077450
PRIOR PLING DATE: 1998-03-10
PRIOR PLING DATE: 1998-03-10
PRIOR PLING DATE: 1998-03-12
PRIOR PLING DATE: 1998-03-13
PRIOR PLING DATE: 1998-03-10
PRIOR PLING DATE: 1998-03-20
PRIOR PLING DATE: 1998-03-27
PRIOR PLING DATE: 1998-03-27
PRIOR PLING DATE: 1998-03-27
PRIOR PLING DATE: 1998-03-31
PRIOR PLING DATE: 1998-03-30
PRIOR PLING DAT
```

NUMB 1999 NUMB 1999 NUMB 1999 NUMB 1999	RR: 60/08256 R: 60/08256 R: 60/08270 R: 60/08280 R: 60/08270 R: 60/08270 R: 60/08270 R: 60/08273 R: 60/08273 R: 60/08273 R: 60/0833 R: 60/08349 R: 60/08349 R: 60/08358 R: 60/08358 R: 60/08358 R: 60/08358	NUMBER: 6 1998-04-1 1998-04-1 1998-04-1 1998-04-1 1998-04-1 1998-05-1 1998-05-1 1998-05-1 1998-05-1 1998-05-1 1998-05-1 1998-05-1 1998-05-1 1998-05-1 1998-05-1 1998-05-1 1998-05-1 1998-05-1 1998-05-1 1998-05-1 1998-05-1
PLICATION LING DATE PLICATION LING DATE PLICATION LING DATE PLICATION LING DATE LING DATE PLICATION LING DATE LING D	ING DATE PLICATION THE DATE PLIC	filorus Paris de la company d
	PRIOR	PRIOR

GENERAL INFORMATION

	2	PR PA PA PA							16 16 16 16			** ** ** **		** ** **			
																<u>-</u>	
780	840 840	006	096	1020	1080	1140	1200	1260	1320	1380	1440	1500	1560	1620	1680		
721 TGGGAGACCCATCTCTTGTGCTCCAGACTTCATCACAGGCTGCTTTTTATCAAAAGG 	781 GGAAAACTCAIGCCIIICCIIIIIAAAAAAIGCIIIIIIIIII	841 TACATCTGAGCTTTATAAGCGCCCGGGAGGAACAATGAGCTTGGTGGACACATTTCATTG 	901 CAGIGINGCICCATICCIAGCINGGAAGCINCGCINAGAGGICCIGGCGCCTCGGCAC	961 AGCTGCCACGGGCTCTCCTGGGCTTATGGCCGGTCACAGGCTCAGTGTGACTCCACAGTG	1021 GCCCTGTAGCCGGGCAAGCAGGACCAGGTCTCTCTGCATCTGTTCTCTGGGAACTCAA	1081 GTTTGGTTGCCAGAAAATGTGCTTCATTCCCCCCTGGTTAATTTTTACACACCCTAGGA	1141 AACATTTCCAAGATCCTGTGATGGCGAGACAAATGATCCTTAAAGAAGGTGTGGGGTCTT	1201 TCCCAACCTGAGGATTTCTGAAAGGTTCACAGGTTCAATATTTAATGCTTCAGAAGCATG 1201 TCCCAACCTGAGGATTTCTGAAAGGTTCACAGGTTCAATATTTAATGCTTCAGAAGCATG	1261 TGAGGTTCCCAACACTGTCAGCAAAACCTTAGGAGAAAACTTAAAAATATATGAATACA 	1321 TGGGCAATACACAGGTACAGACACATTCTGTTGACAAGGAAAACCTTCAAAGCATGT 	1381 TICTITCCTCACCACAACAGAACATGCAGTACTAAAGCAATATATTTGTGATTCCCCAT	1411 GTAATTCTTCAATGTTAAACAGTGCCGCTCCTTTCGAAAGCTAAGATGACCATGCGCCC	1501 TITCCTCTGTACATATACCCTTAAGAACGCCCCCTCCACACACTGCCCCCCAGTATATGC	1561 CGCATTGTACTGCTGTGTTATATGCTATGTACATGTCAGAAACCATTAGCATTGCATGCA	1621 GGTTTCATATTCTTTCTAAGATGGAAGTAATAAAATATATAT	681 AAAAA 1689 	1681 AAAA 1685
ð 8	g &	& ପ୍ର	\$ g	රි සි	දු පු	Ş d	& A	රු සි	\$ A	ර සි	\$ g	\dot \frac{1}{2}	දි දි	& g	çy G	ò	ପ୍ର

RESULT 15 8-09-918-585A-369 ; Sequence 369, Application US/09918585A ; Publication No. US20030060406A1

```
GREACH, INCORPATION, AND ADDRESS, AND ADDRES
```

DR FILING DATE: 1998-03-27

DR APPLICATION NUMBER: 60/079920

DR APPLICATION NUMBER: 60/079920

DR APPLICATION NUMBER: 60/079920

DR FILING DATE: 1998-03-30

DR FILING DATE: 1998-03-31

DR APPLICATION NUMBER: 60/080105

DR FILING DATE: 1998-03-31

DR APPLICATION NUMBER: 60/080165

DR FILING DATE: 1998-03-31

DR APPLICATION NUMBER: 60/080194

DR FILING DATE: 1998-04-01

DR APPLICATION NUMBER: 60/080327

DR APPLICATION NUMBER: 60/08038

DR FILING DATE: 1998-04-01

DR APPLICATION NUMBER: 60/08038

DR FILING DATE: 1998-04-01

DR APPLICATION NUMBER: 60/08033

DR FILING DATE: 1998-04-01 | APPLICATION NUMBER: 60/081049
| RILING DATE: 1998-04-08
| RAPLICATION NUMBER: 60/081071
| RAPLICATION NUMBER: 60/081195
| RAPLICATION NUMBER: 60/081203
| RAPLICATION NUMBER: 60/081203
| RAPLICATION NUMBER: 60/081203
| RILING DATE: 1998-04-09
| RAPLICATION NUMBER: 60/081229
| RILING DATE: 1998-04-09
| RILING DATE: 1998-04-15
| RAPLICATION NUMBER: 60/081819
| RILING DATE: 1998-04-15
| RAPLICATION NUMBER: 60/081819
| RILING DATE: 1998-04-15
| RAPLICATION NUMBER: 60/081819
| RILING DATE: 1998-04-15
| RAPLICATION NUMBER: 60/081818
| RAPLICATION NUMBER: 60/08268
| RILING DATE: 1998-04-15
| RAPLICATION NUMBER: 60/08268
| RAPLICATION NUMBER: 60/08268
| RAPLICATION NUMBER: 60/08268
| RAPLICATION NUMBER: 60/08269
| RILING DATE: 1998-04-22
| RAPLICATION NUMBER: 60/08270
| RAPLICATION NUMBER: 60/08332
| RAPLICATION NUMBER: 60/083336
| RAPLICATION NUMBER: 60/083336 FILING DATE: 1998-04-29
APPLICATION WINDER: 60/083545
FILING DATE: 1998-04-29
APPLICATION NUMBER: 60/083554 RRHION

PRILICA

PRIL

121 GGGTGGCGTCTCCGGGCCGCCGCTCCGACGGGCCAGCGCCCTCCCCATGTCCTGCTCCC 180 121 GGGTGGCGTCTCCGGGCCGCTCCGACGGGCCAGCGCCCTCCCCATGTCCCTGCTCCC 180 181 ACGCCGCGCCCCCCCCCCCCCCACAAGAGGCTCCTGGCGGCCGCGCTGCTCCTGCTGCTGCTGCT 181 ACGCCGCGCCCTCCGGTCAGCATGAGGCTCCTGGCGGCCCGCGCTGCTGCTGCTGCTGCT 1 GCGGAGACAAGCGCAGAGCGCAAGGCCAACAGACAGCCCTGGGCATCCACGACGG 61 CGCAGCCGGAGCCAGCAGAGCCGCAAGCGGCCCCGGGCAGAAAACCCAAGCAAGCCCAAGCCT 0; Gaps DB 10; Length 1685; 0; Indels 100.0%; Score 1685; 100.0%; Pred. No. 0; live 0; Mismatches PRIOR FILING DATE: 1998-04-29
PRIOR PAPLICATION NUMBER: 60/08358
PRIOR FILING DATE: 1998-04-29
PRIOR FILING DATE: 1998-04-29
PRIOR FILING DATE: 1998-04-29
PRIOR PLING DATE: 1998-04-29
PRIOR APPLICATION NUMBER: 60/083742
PRIOR PLING DATE: 1998-04-30
PRIOR APPLICATION NUMBER: 60/084414
PRIOR PILING DATE: 1998-05-06
PRIOR PILING DATE: 1998-05-06
PRIOR PLING DATE: 1998-05-06
PRIOR PLING DATE: 1998-05-06
PRIOR APPLICATION NUMBER: 60/084414
PRIOR PLING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/08463
PRIOR PLING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/08464
PRIOR PLING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/08464
PRIOR PLING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/08464
PRIOR PLING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/08463
PRIOR PLING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/08539
PRIOR PLING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/08539
PRIOR PLING DATE: 1998-05-07
PRIOR PELING DATE: 1998-05-13
PRIOR PELING DATE: 1998-05-15
PRIOR PELING DATE: 1998-05-15 Query Match 100. Best Local Similarity 100. Matches 1685, Conservative 셤 a g ò à δ

ö

240

요 양 요

8 8 8 8 8

a

8 6 8 6 8

ል ይ ል

Search completed: April 26, 2004, 11:07:14 Job time : 1861 secs

```
1321 TGCGCAATACACAGCTACAGACACACATTCTGTTGACAAGGGAAAACCTTCAAAGCATGT 1380
                                                                  1681 AAAAA 1685
                                                                         1681 AAAAA 1685
             셤
                              6 6 6 6
       ò
                   ઠે
                        g
                                                       à
                                                            qq
                                                                  ð
```

```
GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
```

```
April 26, 2004, 03:31:29 ; Search time 6718 Seconds (without alignments) 10871.243 Million cell updates/sec
                                                                                                                                                                                                1 goggagacaagogoagagog.......aatgtaaaaaaaaaaaaa 1685
                                                                                                                                                                                                                                                                                                                                                                         6940544
                                                                                                                                                                                                                                                                                                                                                                   Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                        3470272 seqs, 21671516995 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Post-processing: Minimum Match 08
Maximum Match 1008
Listing first 45 summaries
OM nucleic - nucleic search, using sw model
                                                                                                                                                                                                                                              IDENTITY NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GenEmbl:*

11. gb ba:*

41. gb ba:*

42. gb ntg:*

43. gb om:*

43. gb om:*

44. gb ph:*

45. gb ph:*

46. gb pr:*

47. gb ph:*

48. gb om:*

48. gb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    em_htgo_mus: *
em_htgo_other: *
                                                                                                                                                                                                                                                                                                                                                                                                                      Minimum DB seq length: 0 Maximum DB seq length: 2000000000
                                                                                                                                                US-09-978-189-369
1685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Title: Perfect score:
                                                                                                                                                                                                                                                Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Database :
                                                                                                                                                                                                     Sequence:
                                                                                                                                                                                                                                                                                                                        Searched:
                                                Run on:
```

Pred. No. is the number of results predicted by chance to have a

PAT 29-NOV-2002

linear

DNA

AX56505 LOCUS DEFINITION ACCESSION VERSION KEYWORDS SOURCE ORGANISM

Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.

Homo sapiens (human) Homo sapiens 1 Fong, S., Goddard, A., Hillan, K.J., Roth, I. and Wood, W.I. Polypeptides and nucleic acids for bolekine Patent: WO 02077028-A 1 03-OCT-2002;

REFERENCE AUTHORS TITLE JOURNAL

score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

	    	74.17.17	505 Se	9068	5401	200	100	1100	1206	738	1428	1017	1861	615	1119	000	0 0	0 0	0 6	BD226292 Pancreati	804	81	398 Seguence	393	292 Pancreat	1614	552	0000	1.46 COMPOSIC	MUS WILE	Homo sao	574 Sequence	1814 Secreto	715 Sequen	955	1519 Sequen	713 Compos	6911 Homo s	71210 Sequen	54098 Sequenc	72 Sequence	09566 Composi	30094 Se	35139 Sequenc	
SUMMARIES	ţ	;	AX565505	9	4,	ďι	ກຸ	0 -	10	1 .	4	2	5	9	덨	m [	٠,	9 1	ŭ.	2 5	7	9	5	33	ŭ	ㄷ!	S, I	ກຸ	BD209746	AF144	25	) ic	00	7	õ	'n.	7	õ	S	2	ლ !	ຼ	9	ᅼ	ALIGNMENTS
	۶	rength be	685	685	677	677	, L	ה ה ה ה ה ה	4007 40180	200	79970	9420	1811	630	630	0 0	9 0	200	700	962	962	962	962	962	962	845	663	663	663	5663	1884 10	4 6	66	84	84	64	64	63	61	61	99	99	40	4	
	Query		00.	00	۲,	٠.	٠,	. u	10	9 0	8.6	8	e,	4.	4.	4.1	٠,	٠,	٠,	: -	H	ή.	ä	ä	ä	m,	m	m d	n		4.24.	, 4	4	ď	ď	ė.	ė	ė.	ທ໌	ιΩ ·	'n	'n	4.	4.	
	(	SCOLE	ന	168	640.	640.	640.		. 00.		175.	175.	163.	092.	092.	092	. 0	0 !		9 6	72	72.	72.	72.	72.	99	27	27			709.6	nα	m	50.		4	ם	39.		35.	N	$\sim$	0	0	
	Result		1	61	m ·	4. r	nι	9 0		) c	Н	П	۲	13	14		1 6	- C	9 0	40	l (N	7	c 23	7	7	26	27	9 00	53	0 6	31	1 m	3 6	m	c 36	37	38	39	40	44	42	43	C 44	4	

```
AAAAA 1685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAAAA
                                                                                                                                                                                           1141
                                                                                                                                                                                                                                                                                    1261
                                                                                                                                                                                                                                                                                                                                 1321
                                                                                                                                                                                                                                                                                                                                                        1381
                                                                                                                                                                                                                                                                                                                                                                             1381
                                                                                                                                                                                                                                                                                                                                                                                                     1441
                                                                                                                                                                                                                                                                                                                                                                                                                           1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                   1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1681
                                                                                                                                                                                                                                                               1261
                                                                                                                                                                                                                                                                                                           1321
                                                                                                                                                                      1141
                                                                                                                                                                                                                 1201
                                                                                                                                                                                                                                       1201
                                                                           1021
                                                                                                 1021
                                                                                                                        1081
                                                                                                                                              1081
        901
                              961
                                                    961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 2
AY358906
LOCUS
DEFINITION
ACCESSION
VERSION
VERSION
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
AUTHORS
                     음 상 음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                              ó;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          960
                                                                                                                                                                                                                                                                                                                                                                                                                                                               480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        780
                                                                                                                                                                                CGCAGCOGGAGCCAGCAGAGCGGGGGGCCCCGGGCAGAGAAAGCCGAGCAGAGCT 120
                                                                                                                                                                                                                               180
                                                                                                                                                                                                                                                  180
                                                                                                                                                                                                                                                                           240
                                                                                                                                                                                                                                                                                                240
                                                                                                                                                                                                                                                                                                                                              300
                                                                                                                                                                                                                                                                                                                                                                      360
                                                                                                                                                                                                                                                                                                                                                                                           360
                                                                                                                                                                                                                                                                                                                                                                                                                  420
                                                                                                                                                                                                                                                                                                                                                                                                                                       420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     480
                                                                                                                                                                                                                                                                                                                        300
                                                                                                                                     09
                                                                                                                                                   9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCACCCCAAGCTGCAGAGCCCTTCATCAAGGGTACAACGCCTGGAAACGAGAAAACGCTTCATCAAGTGGTACAACGCCTGGAACGAGAAAACCCCCAAGCGCTTCATCAAGTGGTACAACGCCTGGAACGAAACGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGAAAACTCATGCCTTTTTAAAAATGCTTTTTGTATTTGTCCATACGTCACTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGAAAACTCATGCCTTTCCTTTTTAAAAATGCTTTTTTGTATTTTGCTTTCATTACCATACGTCACTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAGTGTTGCTCCATTCCTAGCTTGGGAAGCTTCCGCTTAGAGGTCCTGGCCGCCTCGGCAC
                                                                                                                                                                                                                      GATCCGCTACAGCGACGTGAAGCTGGAAATGAAGCCCAAAGTACCCGCACTGCGAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                 GOGGAGACAAGCGCAGCGCACGCCACGGCCACAGACAGCCCTGGGCATCCACCGACGG
                                                                                                                                                  Accededecectrecterroadandadorectroecaecedecreetrectrectreetrectre
                                                                                                                Gaps
                                                                                                              ö
                                                                                         Length
                                                                                                               Indels
                                                                                         .
9
                                                                                                               ö
                                                                                         DB
DB
                                                                                        Query Match 100.0%; Score 1685; Best Local Similarity 100.0%; Pred. No. 0; Matches 1685; Conservative 0; Mismatches
                      1. .1685
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
Genentech, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              901
                                                                                                                                        4
                                                                                                                                                                                      61
                                                                                                                                                                                                           61
                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                            241
                                                                                                                                                                                                                                                                                                                                                 241
                                                                                                                                                                                                                                                                                                                                                                                               301
                                                                                                                                                                                                                                                                                                                                                                                                                     361
                                                                                                                                                                                                                                                                                                                                                                                                                                            361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           601
                                                                                                                                                                                                                                                                                                                                                                        301
           FEATURES
                                                                    ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                               25 de 
                                                                                                                                                                                                     9
8
8
                                                                                                                                        5 8 5
```

GCCCTGTAGCCGGGCAAGCAGGAGCAGGTCTCTGCATCTGTTCTCTGAGGAACTCAAAGGAACTCAAGGGAACTCAAGGGAACTCTCTGCATCTGTTCTCTGAGGAAGCAGGAAGCAGGTCTCTCTGCATCTGTTCTCTGAGGAAGCTCAA TCCCAACCTGAGGATTTCTGAAAGGTTCACAGGTTCAATATTTAATGCTTCAGAAGCATG AGCTGCCACGGGCTCTCCTGGGCTTATGGCCGGTCACAGCCTCAGTGTGACTCCCACAGTG 

AY358906 1685 bp mRNA linear PRI 03-OCT-2003
Homo sapiens clone DNA39523 SCYB14 (UNQ240) mRNA, complete cds.
NA AY358906.1
AY358906.1
AY358906.1
Homo sapiens (human)
Homo sapiens (human)
Homo sapiens (human)
Homo sapiens (human)
Sukaryota, Metazoa, Chordata, Craniata, Vertebrata; Buteleostomi;
Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi;
Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi;
Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi;
Bukaryota, Metazoa, Chordata, Craniata, Hominidae, Homo.

Salark, H.F., Gurney, A.L., Abaya, E., Baker, K., Baldwin, D., Brush, J.,
Salark, H.F., Curney, A.L., Abaya, E., Baker, K., Baldwin, D., Brush, J.,
Haldens, S., Huang, A., Kim, H.S., Klimowski, L., Jin, Y., Johnson, S.,
Lee, J., Lewis, L., Liao, D., Mark, M., Robbie, E., Sanchez, C.,

```
Mon Apr 26 15:46:50 2004
```

```
ઠે
                                                     a
                                                                                       ઠ
                                                                                                                     ď
                                                                                                                                                      ઠે
                                                                                                                                                                                       셤
                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                           ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
Schoenfeld, J., Seshagiri, S., Simmons, L., Singh, J., Smith, V., Stinson, J., Vagts, A., Vandlen, R., Matanabe, C., Wieand, D., Woods, K., Xie, M. H., Yansura, D., Yi, S., Yu, G., Yuan, J., Zhang, M., Zhang, Z., Goddard, A., Wood, W. I. and Godowski, P. The Serreted Protein Discovery Initiative (SPDI), a Large-Scale Effort to Identify Novel Human Secreted and Transmembrane Proteins.
                                                                                                                                                                                                                                                                                                                                                                                                                                                            /protein_id="AAQ89265.1"
Ab xxef="d1:37182930"
/translation="## SPGLIPREPPVSWRLLAAALLLLLLALYTARVDGSKCKGSRKGP
/translation="## SPGLIPREPPVSWRLAAALLLLLLALYTARVDGSKCKGSRKGP
KIRYSDVKKLEMKPKYPHCEEKMVIITTKSVSRYRGQEHCLHPKLQSTKRFIKMYNAW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CGCAGCCGGAGCCAGCAGAGCCGGAAGGCGCGCCCCGGGCAGAGAAAGCCGAGAGAGAT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61 CGCAGCCGAGCCAGCAGCCGGAAGGCGCGCCCCGGGCAGAAAGCCGAGCGAGCT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121 GGGTGGCGTCTCCGGGCCGCCGCTCCGACGGGCCAGCGCCTCCCCATGTCCCTGCTGCC 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121 GGGTGGCGTCTCCGGGCCGCTCCGACGGGCCAGCCCCCCATCTCCCATGTCCTCCC 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181 ACGCCGCGCCCCTCCGGTCAGCATGAGGCTCCTGGCGGCCGCGCTGCTCCTGCTGCTGCTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     241 GGCGCTGTACACCGCGCGTGTGGACGGGTCCAAATGCAAGTGCTCCCCGGAAGGGACCCAA 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301 GATCCGCTACAGCGACGTGAAGAAGCTGGAAATGAAGCCAAAGTACCGGCACTGCGAGGA 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       361 GAAGATGGTTATCATCACCACCAGGAGGGTGTCCAGGTACCGAGGTCAGGAGCACTGCCT 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               481 GCGCAGGGTCTACGAAGAATAGGGTGAAAAACCTCAGAAGGGAAAACTCCAAACCAGTTG 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     241 GGGGCTGTACACCGGGGTGTGGACGGGTCCAAATGCAAGTGCTCCCGGAAGGGACCAA 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       301 GATCCGCTACAGCGACGTGAAGAAGCTGGAAATGAAGCCAAAGTACCCGCACTGCGAGGA 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       361 GAAGATGGTTATCATCACCACCAGGAGGGTGTCCAGGTACCGAGGTCAGGAGCACTGCCT 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       421 GCACCCCAAGCTGCAGAGCACCAAGCGCTTCATCAAGTGGTACAACGCCTGGAACGAGAA 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        481 GCGCAGGGTCTACGAAGAATAGGGTGAAAAACCTCAGAAGGGAAAACTCCAAACCAGTTG 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Clark, H.F.
Clark, H.F.
Direct Submission
Submitted (01-AUG-2003) Department of Bioinformatics, Genentech,
Inc., I DNA Way, South San Francisco, CA 94080, USA
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCGGAGACAAGCGCAGGGCGCACGGCCACAGACAGCCCTGGGCATCCACCGACGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 100.0%; Score 1685; DB 9; Length 1685; Best Local Similarity 100.0%; Pred. No. 0; Matches 1685; Conservative 0; Mismatches 0; Indels 0;
                                                                                                    A Bioinformatics Assessment
Genome Res. 13 (10), 2265-2270 (2003)
12975309
2 (bases 1 to 1685)
                                                                                                                                                                                                                                                                       /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="DNA39523"
                                                                                                                                                                                                                                                                                                                                                         /locus_tag="UNO240"
167. .502
                                                                                                                                                                                                                                                                                                                                                                                          /locus_tag="UNQ240"
                                                                                                                                                                                                                                                                                                                                                                                                                                              /product="SCYB14"
                                                                                                                                                                                                                                                                                                                                                                                                                           /codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                           /note="PRO273"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NEKRRVYEE"
                                                                                                                                                                                                                                                                                                                                             1. .1685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                          source
                                                                                                                                   PUBMED
REFERENCE
                                                                                                                                                                                     TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                             gene
                                                                                                                                                                      AUTHORS
                                                                                                                      JOURNAL
                                                                                                                                                                                                                                                                                                                                                                            CDS
                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            යු ද
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ВÞ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g &
```

```
1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1081 GITTGGTTGCCAGAAAAFGTGCTTCATTCCCCCCTGGTTAATTTTTACACACCCTAGGA 1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    961 AGCTGCCACGGGCTCTCCTGGGCTTATGGCCGGTCACAGCCTCAGTGTGACTCCACAGTG 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1081 GTTTGGTTGCCAGAAAATGTGCTTCATTCCCCCCTGGTTAATTTTTACACACCCTAGGA 1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCCCAACCTGAGGATTTCTGAAAGGTTCACAGGTTCAATATTTAATGCTTCAGAAGCATG 1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1201 TCCCAACCTGAGGATTTCTGAAAGGTTCACAGGTTCAATATTTAATGCTTCAGAAGCATG 1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGCGCAATACACAGCTACAGACACACATTCTGTTGACAAGGGAAAACCTTCAAAGCATGT 1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1261 TGAGGTTCCCAACACTGTCAGCAAAAACCTTAAGGAGAAAACTTAAAAATATATGAATACA 1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGCGCAATACACAGCTACAGACACACATTCTGTTGACAAGGGAAAACCTTCAAAGCATGT 1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TICITICCCICACCACACACAIGCAGIACTAAAGCAAIAITIGIGAITCCCCAI 1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1381 TTCTTTCCCTCACACAACATGCAGTACTAAAGCAATATATTGTGATTCCCCAT 1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTAATTCTTCAATGTTAAACAGTGCAGTCCTCTTTCGAAAGCTAAGATGACCATGCGCCC 1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITCCTCTGTACATATACCCTTAAGAACGCCCCCTCCACACACTGCCCCCAGTATATGC 1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 900
                                                                                                                                                                                                                                                                 720
                                                                                                                                                                                                                                                                                                                                                                                                                           840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               960
                                                                                                                                                                                                                                                                                                                                                           721 TGGGAGACCCATCTCTTGTGCTCCAGACTTCATCACAGGCTGCTTTTTATCAAAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    901 CAGTGTTGCTCCCATTCCTAGCTTGGGAAGCTTCCGCTTAGAGGTCCTGGCGCCTCGGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1021 GCCCCTGTAGCCGGGCAAGCAGGAGCAGGTCTCTCTGCATCTGTTCTCTGAGGAACTCAA
601 AAAAAAAAAAAAGCCTTTCTTTCTCACAGGCATAAGACACAAATTATATATTATTATGT
                                                                                                                                                                                                            661 AGCACTITITACCAACGGTCAGTTTTTACATTTTATAGCTGCGTGCGAAAGGCTTCCAGA
                                                                                                                                                                                                                                                                                                                     neconcontrations
                                                                                                                                                                                                                                                                                                                                                                                                                           GGAAAACTCATGCCTTTTTTTAAAAATGCTTTTTTGTATTTGCCATACGTCACTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  841 TACATCTGAGCTTTATAAGCGCCCGGGAAGAACAATGAGCTTGGTGGACACATTTCATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      841 TACATCTGAGCTTTATAAGCGCCCGGGAGGAACAATGAGCTTGGTGGACACATTTCATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      961 AGCTGCCACGGGCTCTCCTGGGCTTATGGCCGGTCACAGCCTCAGTGTGACTCCACAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1021 GCCCCTGTAGCCGGGCAAGCAGGAGCAGGTCTCTCTGCATCTGTTCTCTGAGGAACTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTAATTCTTCAATGTTAAACAGTGCAGTCCTCTTTCGAAAGCTAAGATGACCATGCGCCC
                                                                                                      601 AAAAAAAAAAAGCCTTTCTTTCTCACAGGCATAAGACACAAATTATATATTGTTATGA
                                                                                                                                                                                                                                                                 CAGTGTTGCTCCATTCCTAGCTTGGGAAGCTTCCGCTTAGAGGTCCTGGCGCCCTCGGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1141 AACATTTCCAAGATCCTGTGATGGCGAGACAAATGATCCTTAAAGAAGGTGTGGGGGTCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1441
                                                                                                                                                                                                                                                                                                                     721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1501
                                                                                                                                                                                                                                                                                                                                                                                                                           781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1561
```

Innear PAT 30-MAY-2001  linear PAT 30-MAY-2001  linear PAT 30-MAY-2001  Vertebrata; Euteleostomi; Hominidae, Homo. Hominidae, Homo. JustinalyTakvDGSKCKCSRKGP JSRYKGGEHCLHPKLGSTKRFIKMYNAW  i. Indels 9; Gaps 1;  L; Indels 9; Gaps 1;  L; Indels 9; Gaps 1;  CAGCCCTCGCGCATCCACCGACGG 60	- <del></del>
1621 GGTTTCATATTCTTTCTAAGATGGAAAGTAATAAATA 1621 AAAA 1685 1681 AAAA 1685 1881 AAAAA 1685 1881 AAAAA 1685 1881 AAAAA 1685 1881 AAAAA 1685 1881 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	GAAGATGATTATCATCACCACCAAGAGCCTGTCCAGGTACCGAGGTCAGGAGCACTGGCT 42 

421 GCACCCAAACTGCAGAGCACCAAGCGCTTCATCAAGTGGTAC 	CAACGCCTGGAACGAGAA 480 
1 GCGCAG        7 GCGCAG	AAAACTCCAAACCAGTTG 540 
GGAGAC        7 GGAGAC	aaaaaaaaaaaaaa 600 
601 AARARARARAGCCTITCTITCTCACAGGCATRAGACACAAATTATAITAITGITAIGA 66 	AATTATATATTGTTATGA 660 
661 AGCACTTTTACCAACGGTCAGTTTTTACATTTTATAGCTGCC	GTGCGAAAGGCTTCCAGA 720 
721 IGGGAGACCCATCTCTGTGCTCCAGACTTCATCACAGGC. 	AGG
ფ—ფ	CTA CTA
841 TACATCTGAGCTTTATAAAGCGCCCGGGAGGAACAATGAGCTTC 	711G
901 CAGIGITGCICCATICCTAGCITGGGAAGCITCCGCITAGAG 	3CAC 960      3CAC 967
reccacegerreregegerrangecee 	AGTG 102      AGTG 102
CCCTGTAGCCGGGCAAGCAGGAGCAGGTCTC	TICTGCALCTGTTCTCTGAGGAACTCAA 1080
081 GTTTGGTTGCCAGAAAAAGTGTGCTTCATTCCCC 	AGGA 114      AGGA 114
4 4 4 8 4 4	rcrr 120       crr 120
01 T	CATG 126
61 T 68 T	TACA 132      TACA 132
 21 28 T	GAAAACCTTCAAAGCATGT 1380 
 1381 TTCTTTCCCTCACCACAACACATGCAGTACTACTAAAGCAAT	CCAT 144       CCAT 144
 441 G 448 G	GCCC 150      GCCC 150

```
1501 TITCCICTGTACATATACCCTTAAGAACGCCCCCCCCACACACTGCCCCCCAGTATATGC 1560
                                      1508 TITCULCIGIATACATATACCCITAAAAAGCCCCCCCCCACACACACCCCCCCAGAAAAAGC 1567
                                                                                         linear PAT 18-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Angelin, To 2002017376-A 162 22-JAN-2002;

Retent: JP 2002017376-A 162 22-JAN-2002;

HELIX RESEARCH INSTITUTE
OS Homo sapiens (human)

PN JP 2002017376-A/162

PN JP 2007UN-2000 JP 200253173

PI TOSHIO OTA, TAKAO ISOGAI, TETSUO NISHIKAWA, YURI KAWAI, TOMOYASU

PI SUGIYANA,

PI KOJI HAYASHI

PC CIINIS/09, CO7K14/47, CO7K16/18, CI2N1/15, CI2N1/19, CI2N1/21, CI2N5/ PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          77 CGCAGCCGGAGCCAGAGAGCCGGAAAAGCCCCCGGGCAGAGAAAGCCGAGAAAAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121 GGGTGGCGTCTCCGGGCCGCCGCTCCGACGGGCCAGCGCCCTCCCCATGTCCCTGCTCCC 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241 GGCGCTGTACACCGCGCGTGTGGACGGGTCCAAATGCAAAGTGCTCCCGGAAGGGACCCAA 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61 CGCAGCCGGAGCCAGCAGAGCCGGAAGGCGCCCCCGGGCAGAGAAAGCCGGAGCAGAGCT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      137 GGGTGGCGTCTCCGGGCGGCGGCTCCGACGGGCCAGCGCCCTCCCCATGTCCCTGCTCCC 196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181 ACGCCGCCCCCTCCGGTCAGCATGAGGCTCCTGGCGGCCGCCGCTGCTCCTGCTGCTGCTGTT 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 1677)
Ota,T., Isogai,T., Nishikawa,T., Kawai,Y., Sugiyama,T. and
Hayashi,K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17 GCGGAGACAAGCGCAGAGCGCAAGCGCCACAGACAGCCCTGGGCATCCACCGACGG 76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 GCGGAGACAAGCGCAGAGCGCAGCGCCACGGCCACAGACAGCCCTGGGCATCCACCGACGG
                                                                                                                                                                                                            1628 GGTTTCATATTCTTTCTAAGATGGAAAGTAATAAAATATATTTGAAATGT 1677
                                                                                                                                                                                   1621 GGITTCATATTCTTTCTAAGATGGAAAGTAATAAAATATATTTGAAATGT 1670
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      97.4%; Score 1640.4; DB 6; Length 1677; 99.4%; Pred. No. 0; ative 0; Mismatches 1; Indels 9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                C12P21/02, C12Q1/68//C12P21/08, C12N15/00, C12N5/00 CC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Secretory protein or membrane protein
FH Key Location/Qualifiers
FT CDS (183). (515).
                                                                                                                                                                                                                                                                                                                                                                      Secretory protein or membrane protein. BD123653
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (183). (515).
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="Homo sapiens"
/mol type="genomic DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                      1677 bp
                                                                                                                                                                                                                                                                                                                                                                                                                 BD123553.1 GI:23218598
JP 2002017376-A/162.
Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ouery Match
Best Local Similarity 99.44
Matches 1660, Conservative
                                                                                                                                                                                                                                                                                                                                                      BD123653
                                                                                                                                                                                                                                                                                                   RESULT 4
BD123653
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORIGIN
                              92
                                                                                                                             a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                윱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       д
                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              \stackrel{>}{\circ}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                   8
                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    \dot{\delta}
```

```
961 AGCTGCCACGGGCTCTCCTGGGCTTATGGCCGGTCACAGCCTCAGTGTGACTCCACAGTG 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        968 AGCTGCCACGGGGCTCTCCTGGGCTTATGGCCGGTCACCCTCAGTGTGACTCCACAGTG 1027
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1081 GTTTGGTTGCCAGAAAATGTGCTTCATTCCCCCCTGGTTAATTTTTACACACCCTAGGA 1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1088 GTTTGGTTGCCAGAAAATGTGCTTCATTCCCCCCCGGGTAATTTTTACACACCCTAGGA 1147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1201 TCCCAACCTGAGGATTTCTGAAAGGTTCACAGGTTCAATATTTAATGCTTCAGAAGCATG 1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1208 TCCCATCCTGAGGATTTCTGAAAGGTTCACAGGTTCAATATTTAATGCTTCAGAAGCATG 1267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1261 IGAGGITCCCAACACTGTCAGCAAAACCTTAGGAGAAAACTTAAAAATATATGAATACA 1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1321 TGCGCAATACACAGCTACAGACACACATTCTGTTGACAAGGGAAAACCTTCAAAGCATGT 1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1021 GCCCCTGTAGCCGGGCAAGCAGGAGCAGGTCTCTGTGCATCTGTTCTCTGAGGAACTCAA 1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1028 GCCCCTGTAGCCGGGCAAGCAGGAGCAGGTCTCTCTGCATCTGTTCTCTGAGGAACTCAA 1087
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1148 AACATTICCAAGAICCIGIGAIGGCGAGACAAIGAICCITAAAGAAGGAGGIGIGGGGICIT 1207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1328 TGCGCAATACACAGCTACAGACACACATTCTGTTGACAAGGGAAAACCTTCAAAGCATGT 1387
                                                                                                                                                                                                                                                                                                                377 GAAGATGGTTATCATCACCACCACCAAGGGTGCCAGGTACCGAGGTCAGGAGGTCATGCCT 436
257 GGGGCTGTACACCGCGCGGGTGTGGACGGGTCCAAATGCAAGTGCTCCCGGAAGGGACCCAA 316
                                                                                     301 GATCCGCTACAGCGACGTGAAGAAGCTGGAAATGAAGCCAAAGTACCCGCACTGCGAGGA 360
                                                                                                                                     317 GATCCGCTACAGCGACGTGAAGAAGCTGGAAATGAAGCCAAAGTACCCGCACTGCGAGGA 376
                                                                                                                                                                                                                                                            361 GAAGATGGTTATCATCACCACCAAGAGCGTGTCCAGGTACCGAGGTCAGGAGCACTGCCT 420
                                                                                                                                                                                                                                                                                                                                                                                                                                       421 GCACCCCAAGCTGCAGAGCACCAAGCGCTTCATCAAGTGGTACAACGCCTGGAACGAGAA 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            481 GCGCAGGGTCTACGAAGATAGGGTGAAAAACCTCAGAAGGGAAAACTCCAAAACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   497 GCGCAGGGTCTACGAAGAATAGGGTGAAAAACCTCAGAAGGGAAAACTCCAAACCAGTTG 556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         601 AAAAAAAAAAAAAGCCTTTCTTCTCACAGGCATAAGACACAAATTATATATTGTTATGA 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               608 AAAAAAAAAAAAAAGCCTTTCTTTCTCACAGGCATAAGACACAAATTATATATTGTTATGA 667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      661 AGCACTITITACCAACGGTCAGTTTTTACATTTTATAGCTGCGAAAGGCTTCCAGA 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              668 AGCACTITITACCAACGGTCAGTITITATACTITATACCTGCGTGCGAAAGGCTTCCAGA 727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  721 TGGGAGACCCATCTCTTGTGCTCCAGACTTCATCACAGGCTGCTTTTTATCAAAAGG 780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   781 GGAAAACTCATGCCTTTCCTTTTTAAAAATGCTTTTTTGTATTTGTCCATACGTCACTA 840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              788 GGAAAACTCATGCCTTTCCTTTTTAAAAATGCTTTTTTGTATTTGTCCATACGTCACTA 847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    841 TACATCTGAGCTTTATAAGCGCCCGGGAGGAACAATGAGCTTGGTGGACACATTTCATTG 900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   901 CAGIGITGCTCCATTCCTAGCTTGGGAAGCTTCCGCTTAGAGGTCCTGGCCCTCGGCAC 960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          908 CAGTGTTGCTCCATTCCTAGCTTGGGAAGCTTCCGCTTAGAGGTCCTGGCGCCTCGGCAC 967
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1141 AACATTTCCAAGATCCTGTGATGGCGAGACAAATGATCCTTAAAGAAGGTGTGGGGGTCTT
```

8 6 6 6 B

8

g

ò

g

8 6

ઠ

ઠ 셤 à 셤 ઠે g 8 a ò g ઠે В ઠે g à g à a 8 g à g ઠે g

```
원
장
원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                6 6 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
8
8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              경 염
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              원
                                                                                                                                                                                                                                                                                                95
Pp 95
                                                                                                                                                                                                                                                                                                                                                     8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                 8 & 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   6 6 6
                                                                                                                                                                                                          g
                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                   g
                                                                                                                                                       d
                                                                                                                                                                                      δ
ద
                    \dot{\varsigma}
                                                g
                                                                        \dot{\delta}
                                                                                                   g
                                                                                                                                   Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              lsogai, T. and Yamamoto, J.

Isogai, T. and Yamamoto, J.

Birect Submission

Direct Submission

Burect Submission

Genomics Laboratory; 1532-3 Yana, Kisarazu, Chiba 292-0812, Japan

Genomics Laboratory; 1532-3 Yana, Kisarazu, Chiba 292-0812, Japan

(B-mail:genomics@hti.co.jp, Tel:81-438-52-395, Fax:81-438-52-3986)

HRI human cDNA sequencing project; cDNA 5'- & 3'-end one pass

Bequencing, clone selection and full insert sequencing: Helix

Research Institute (supported by Japan Key Technology Center etc.);

cDNA library construction: Institute of Medical Science, University of Tokyo, Laboratory of Genome Structure, Human Genome Center.

Location/Qualifiers
                                                                                                                                                                            1620
                                                                                                                                                                                                                                                                                                                      AKO75514 1677 bp mRNA linear PRI 03-SEP-2002 Home sapiens cDNA PSEC0212 fis, clone HEMBA1003764, highly similar AKO Home sapiens NJAC protein (NJAC) mRNA.
                                        1447
                                                                    1500
                                                                                             1507
                                                                                                                       1560
                                                                                                                                                   1567
                                                                                                                                                                                                     CGCAGCCGGAGCCAGCAGAGCCGGAAGGCGCGCCCGGGCAGAGAAAAGCCGAGCAGAGAGT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  16
                                                                                                                                                                                                                                                                                                                                                                                                                                       Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17 GCGGAGACAAGCGCAGAGCGCACGCCACGACCAAAACCCTGGGCATCCACCGACGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCGGAGACAAGCGCAAGCGCAACGCCCACACAGACAGCCCTGGGCATCCACCGACGG
                                                                                      1448 GTAATTCTTCAATGTTAAACAGTGCAGTCCTCTTTCGAAAGCTAAGATGACCATGCGCCC
                                                                                                                                          1508 TITCCTCTGTACATATACCCTTAAGAACGCCCCCTCCACACACGCCCCCCCAGTATACG
                                        1388 rrcrrrcccrcaccacaacadaacardcagracraaagcaarararrrgraarrcccar
                                                                    GTAATTCTTCAATGTTAAACAGTGCAGTCCTCTTTCGAAAGCTAAGATGACCATGCGCCC
                                                                                                                       CGCATTGTACTGCTGTTATATGCTATGTACATGTCAGAAACCATTAGCATGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
              TTCTTTCCCTCACCACACAGAACATGCAGTACTAAAAGCAATATATTTGTGATTCCCCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ota,T., Nishikawa,T., Suzuki,Y., Kawai-Hio,Y., Hayashi,K.,
Ishi,S., Saito,K., Yamamoto,J., Wakamatsu,A., Nagai,T.,
Nakamura,Y., Nagahari,K., Sugano,S. and Isogai,T.
HRI human cDNA sequencing project
                                                                                                                                                                                                                                                  GGTTTCATATTCTTTCTAAGATGGAAAGTAATAAAATATTTTGAAATGT 1670
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    97.4%; Score 1640.4; DB 9; Length 1677;
larity 99.4%; Pred. No. 0;
Conservative 0; Mismatches 1; Indels 9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      head"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /organisma"Homo sapiens"
/mol type="mcNA"
/do faref="taxon:9606"
/do folone="HemBal.003764"
/tissue type="whole embryo, mainly he /clone_lib="HemBal"
/dev stage="embryo, 10 weeks"
/note="cloning vector: pME188FL3"
                                                                                                                                                                                                                                                                                                                                                                      AK075514
AK075514.1 GI:22761706
Ak075514.1 GI:22761706
Homo sapiens (human)
Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1, .1677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Simi
Matches 1660;
                                                                                                                                                                               1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61
                                                                                                                          1501
                                                                                                                                                                                                                                     1621
                                                                                                                                                                                                                                                               1628
                 1381
                                                                       1441
                                                                                                                                                                                                                                                                                                      RESULT 5
AK075514
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                     VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE
JOURNAL
REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                       g
                                                                                       d
                                                                                                                                                                                                                          상 염
                 ઠે
                                                                      ò
                                                                                                                                                                                                     g
                                                                                                                    6 B 6
```

```
1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGCTGCCACGGGCTCTCCTGGGCCTTATGGCCGGTCACGCCTCAGTGTGACTCCACAGTG 1020
                                                                                                                                                                                                                                                                                                                                                                             540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              907
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      967
                          180
                                                                                    240
                                                                                                              256
                                                                                                                                            300
                                                                                                                                                                        316
                                                                                                                                                                                                    360
                                                                                                                                                                                                                              376
                                                                                                                                                                                                                                                            420
                                                                                                                                                                                                                                                                                        436
                                                                                                                                                                                                                                                                                                                     480
                                                                                                                                                                                                                                                                                                                                                496
                                                                                                                                                                                                                                                                                                                                                                                                         556
                                                                                                                                                                                                                                                                                                                                                                                                                                     6,00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 607
                                                    196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GITIGGITGCCAGAAAATGTGCTTCATTCCCCCCTGGTTAATTTTTACACACCTAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AACATTTCCAAGATCCTGTGATGGCGAGACAAATGATCCTTAAAGAAGGTGTGGGGGTCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                608 AAAAAAAAAAAAGCCTTTCTTTCTCACAGGCATAAGACACAAATTATATATTTGTTATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAGIGITGCITCCIAGCITGGGAAGCITCCGCTTAGAGGICCTGGCGCCTCGGCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCCCCTGTAGCCGGGCAAGCAGGAGCAGGTCTCTCTGCATCTGTCTCTGAGGAACTCAA
                                                                                                                                                             257 GGCGCTGTACACCGCGCGTGTGGACGGGTCCAAATGCAAGTGCTCCCGGAAGGGACCCAA
                                                                                                                                                                                                                                                             361 GAAGATGGTTATCATCACCACCAAGAGCGTGTCCAGGTACCGAGGTCAGGAGCACTGCCT
                                                                                                                                                                                                                                                                                                                                        481 GCGCAGGGTCTACGAAGAATAGGGTGAAAAACCTCAGAAGGGAAAACTCCAAAACCAGTTG
                                                                                                                                                                                                                                                                                                                                                                                              557 doadactiigiccaaagactiigcagati------aaaaaaaaaaaaaaaaaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             601 AAAAAAAAAAAAGCCTTTCTTTCTCACAGGCATAAGACACAAATTATATATGTTATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       661 AGCACTITITACCAACGGICAGTITITACATITITATAGCIGCGAAAGGCTICCAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGGGAGACCCATCTCTTGTGCTCCAGACTTCATCACAGGCTGCTTTTTATCAAAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 788 GGAAAACTCATGCCTTTCCTTTTTAAAAATGCTTTTTTGTATTTGTCCATACGTCACTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TACATCTGAGCTTTATAAGCGCCCGGGAGGAACAATGAGCTTGGTGGACACATTTCATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           137 desinsaceircriccedesecescesces de la consecuencia de la consecuencia de la consecuencia de la consecuencia
                                                                                                        GOCOCTOTACACCOCCOTOTOGACGGGTCCAAATGCAAGTGCTCCCGGAAGGGACCCAA
                                                                                                                                                                                                     GATCCGCTACAGCGACGTGAAGAAGCTGGAAATGAAGCCAAAAGTACCCGCACTGCGAGGA
                                                                                                                                                                                                                                317 garccecracaceacercaagaagcregaarreaacccaaagracceecacreeaa
                                                                                                                                                                                                                                                                              377 GAAGAIGGITAICAICACCACCAAGAGCGIGICCAGGIACCGAGGICAGGACACACCCA
                                                                                                                                                                                                                                                                                                                     GCACCCCAAGCTGCAGAGCACCAAGCGCTTCAACTGAAGTGGTACAACGCCTGGAACGAGAA
CGCAGCCGGAGCCAGCAGAGCCGGACGCGCCCCGGGCAGAGAAAGCCGAGCAGAGCT
                                                                                     Aceccecececercedarcageargasecrecifecesecrecifecrecrecrecrecrecre
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    968
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1028
                                                                                                                                                                                                                                                                                                                                                                                                                                           541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1088
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        961
                                                                                                                                                                                                          301
                                                                                        181
                                                                                                                   197
                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                          421
                                121
    11
```

ద

8 6

8 6 8 6

8 8 8

a ₹ g ठे g

à

```
음
                                                                                                                                                   à
                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                  ò
                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                 ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                      1380
                                           1208 TCCCATCCTGAGGATTTCTGAAAGGTTCACAGGTTCAATATTTAATGCTTCAGAAGCATG 1267
                                                                                                                1328 TGCGCAATACACAGCTACAGACACACTCTGTTGACAAGGGAAAACCTTCAAAGCATGT 1387
                                                                                                                                                                                                                                                                                                                                               TICITICCCTCACCACAACAGAACAIGCAGIACIAAAAGCAAIAITIGIGATICCCCAI 1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITICITCITGIACATATACCCITTAAGAACGCCCCCCCCCACACACTGCCCCCCCAGTATATGC 1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1508 TITCCTCTGTACATATACCCTTAAGAAGGCCCCCTCCACACTGCCCCCCGGTATATGC 1567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1201 TCCCAACCTGAGGATTTCTGAAAGGTTCACAGGTTCAATATTTAATGCTTCAGAAGCATG 1260
                                                                                                                                                                                                                                                                                                                                                                                                    1388 frictriccorcacacadada cardeda de a contra de contra
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PAT 18-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCGGAGACAAGCGCAGAGCGCAGCCNACGGCCACAGACCAGCCCTGGGCATCCACCGACGG 231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CGCAGCCGGAGCCAGCAGAGCCGGAAGGCGC-GCCCCGGGCAGAGAGACCGAGCAGAGC 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               232 CGCA-CNGNGGCCAGCAGAGCCGGAAGGCGCGCCCCGGGCAGAAAGCCGAGCAGAAGC 290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        120 TGGGTGGCGTCTCCGGGCCGCTCCGACGGGCCAGCGCCCTCCCCATGTCCCTGCTCC 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             291 TGGGTGGCGTCTCCGGGCCGCCGCTCCGACGGGCCAGCGCCCTCCCCATGTCCCTGCTCC 350
                                                                                                                                                                                                                              1321 TGCGCAATACACAGCTACAGACACATTCTGTTGACAAGGGAAAACCTTCAAAGCATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                               GTAATTCTTCAATGTTAAACAGTGCAGTCCTCTTTCGAAAGCTAAGATGACCATGCGCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 (bases 1 to 1865)
Cocks, B.G., Stuart, S.G. and Seilhamer, J.J.
Compositions for the detection of blood cell and immunological response gene expression
Patent: US 6607879-A 225 19-AUG-2003;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     86.0%; Score 1449.2; DB 6; Length 1865;
94.6%; Pred. No. 3.1e-287;
tive 0; Mismatches 57; Indels 34; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 GCGGAGACAAGCGCAGGCGCACGGCCACAGACAGCCCTGGGCATCCACCGACGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1628 GGTTTCATATTCTTTCTAAGATGGAAAGTAATAAAATATATTTGAAATGT 1677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1621 GGTTTCATATTCTTAGGAAGGAAAGTAATAAATATTTGAAATGT 1670
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1865 bp D. Sequence 225 from patent US 6607879. AR379680. GI:40087314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1. .1865
/organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 94.64
Matches 1604; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unknown.
                                                                                                                                                                                                                                                                                                                                               1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                               1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 6
AR379680
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORIGIN
```

g

à

ઠે d ò g

```
1050 TIGCAGIGITGCTCCATTCCTAGCTTGGGAACCTTTCCGCTTAGAGGTCCTGGCGCCTCG 1109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1410 TTCAGAAGCATGTGAGGTTCCCAACACTGTCAGCAAAAACCTTAGGAGAAAACTTAAAAA 1469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    990 characarchdagchrhanaaccccccccaacaacaardagccrhdgrdsacachrhica 1049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1110 GCACAGCTGCCACGGCCTCTCCTGGGCTTATGGCCGGTCACGCCTCAGTGTGACTCCAC 1169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1170 AGTGGCCCTGTAGCCGGGCAAGCAGGAGGTCTCTCTGCGATCTGTTCTCTGAGGAAC 1229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1230 TCAAGTTTGGTTGCCAGAAAAATGTGCTTCATTCCCCCCTGGTTAATTTTTACACGGCCT 1289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1350 GGGGTCTTTTCCCAACCTGAGGGATTTCTGAAAGGTTTCACAGGTTTCAATATTTAATGC 1409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1249 TTCAGAAGCATGTGAGGTTCCCAACACTGTCAGAAAAAGCTTAGGAGAAAACTTAAAAA 1308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1017 AGTGGCCCCTGTAGCCGGGCAAGCAGGAGGAGGTCTCTCTGCATCTGTTCTCTGAGGAAC 1076
                                                                     240 TGGCGCTGTACACCGCGCGTGTGGACGGGTCCAAATGCAAGTGCTCCCGGAAGGGACCCA 299
                                                                                                            300 AGATCCGCTACAGCGACGTGAAGAAGCTGGAAATGAAGCCAAAGTACCCGCACTGCGAGG 359
                                                                                                                                                                                                                                                       360 AGAAGAIGGITATCATCACCACCAAGAGCGIGICCAGGIACCGAGGICAGGAGCACIGCC 419
                                                                                                                                                                                                                                                                                                                                                                                              531 AGAAGATGGTTATCACCACCACCAAGAGCGTGTCCAGGTACCGAGGTCAGGAGCACCTGCC 590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           420 TGCACCCCAAGCTGCAGAGCACCAAGCGCTTCATCAAGTGGTACAAGGCCTGGAACGAGA 479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      480 AGCGCAGGGTCTACGAAGAATAGGGTGAAAAACCTCCAGAAGGGAAAACTCCAAAACGAGTT 539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     659
9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           870 GAIGGGAGACCCATCTTCTTGTGCTCCAGACTTCATCACAGGCTGCTTTTTATCAAAAA 929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     930 GGGGAAACTCATGCTTTCCTTTTTAAAAAAGCTTTTTTGTCTCATACGTCA 989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  838 CTATACATCTGAGCTTTATAAGCGCCCGGGAGGAACAATGAGCTTGGTGGACACTTTCA 897
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 898 TTGCAGTGTTGCTCCATTCCTAGCTTGGGAAGC-TTCCGCTTAGAGGTCCTGGCGCCTCG 956
711 GGGAGACTTGTGCAAAGGACTTTGCAGATT---------AAANNNAA 749
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       660 AAGCACTTTTTA-CCAACGGTCAGTTTTTACATTTTATAGCTGCGGTGCGAAAGGCTTCCA 718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               719 GAIGGGAGACCCAICTCTTGTGCTCCAGACTTCATCACAGGCTGCTTTTTATCAAAAA 778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           779 GGGGAAAQTCATGCCTTTCCTTTTT-AAAAATGCTTTTTTGTATTTGTCCATACGTCA 837
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             600 AAAAAAAAAAAAAAGCCTTTCTTTCTCACAGGCATAAGACACAAATTATATTTGTTATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1137 --AGGAAACATTTCCAA-GATCCTGTGATGGCGAGACAAATGATCCTTAAA-GAAGGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1193 GGGGTCTTT--CCCAACCTGAGGATTTCTGAAAGGTT--CACAGGTTCAATATTTAATGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        957 GCACAGCTGCCACGGCCTCTCCTGGGCTTATGGCCGGTCACAGCCTCAGTGTGACTCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1077 TCAAGITIGGITGCCAGAAAATGTGCTTCATTCCCCCCTGGTTAATTTTTACACACCCT
```

ò g gg

 $\dot{\delta}$ 

ద

ò

g

ò g ò 셤

ò

```
919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1096
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          736
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        941
                                                                                g
                                                                                                               ઠ
                                                                                                                                   셤
                                                                                                                                                                                                                                                    엄
                                                                                                                                                                                                                                                                            상
음
                                                                                                                                                                     8 8 8
                                                                                                                                                                                                                                                                                                                                          $ B
                                                                                                                                                                                                                                                                                                                                                                                          8 G
                                                                                                                                                                                                                                                                                                                                                                                                                                                   상
음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Identification of a novel chemokine family member with altered expression in human head and neck squamous cell carcinoma Unpublished
2 (bases 1 to 1503)
2 (bases 1 to 1503)
4 Harderson,Y., Xu,X., El-Naggar,A.K., Wu,H., Hudson,J.M. and Clayman,G.L.

Direct Submission and Clayman,G.L.

Submitted (19-ARP-1999) Head and Neck Surgery, M.D. Anderson Cancer Cr, 1515 Holcombe Box 69, Houston, TX 77005, USA
             1470 TATATGAATACATGCGCAATACACAGCTACAGACACACATCTGTTGACAAGGGAAAACC 1529
                                                                                                               1488
                                                                                                                                   1590 GTGATTCCCCATGTAATTCTTCAATGTTAAACAGTGCAGTCCTCTTTCGAAAGCTAAGAT 1649
                                                                                                                                                                1608
                                                                                                                                                                                                                                         1710 CCCAGTATATATGCCGCATTGTACTGCTGTGTTATATGCTATGTACATGTCAGAAACCATTA 1769
                                                                                                                                                                                                                                                                               1609 GCATTGCATGTTTCATATTCTTTCTAAGATGGAAAGTAATAAAATATATTTGAAAT 1668
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /codon_start=1
/product="NJAC protein"
/protein_id="AAD38944.1"
/db_xref="GI:505166"
/translation="MRLLAAALLLLLALYTARVDGSKCKCSRKGPKIRYSDVKKLEM
/translation="MRLKSVSRYRGGEHCLHPKLQSTKRFIKWYNAMNEKRRYYEE"
                                                                                                                                                                                                                                                                                                    1770 GCATTGCAGGTTTCATATTCTTTCTAAGATGGAAAGTAATAAAATATATTTGAAT 1829
                                                                                                                                                                                                                                                                                                                                                                                                                                             PRI 15-JUN-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota, Metazoa; Chordata; Craniata, Vertebrata; Ruteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 1503)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       'note="CXC chemokine, putative CXC chemokine similar to
                                                    TTCAAAGCATGTTTCTTTCCTCACCACAACAGAACATGCAGTACTAAAGCAATATATTT
                                                                1530 TICAAAGCATGTITCTTTCCCTCACCACAAGAGACATGCAGTACTAAAGCAATATATTT
                                                                                                            1429 GIGATICCCCAIGTAATICTICAAIGTIAAACAGIGCAGICCTCTTICGAAAGCIAAGAI
                                                                                                                                                                                                                         1549 CCCAGTATATGCCGCATTGTACTGCTGTTATATGCTATGTACATGTCAGAAACCATTA
TATATGAATACATGCGCAATACACAGCTACAGACACACATTCTGTTGACAAGGGAAAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                          AF144103
AF144103 NJAC protein (NJAC) mRNA, complete cds.
AF144103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /map="5q23-q31"
/tissue_type="normal oral epithelial"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /mol_type="mRNA"
/db_xref="taxon:9606"
/chromosome="5"
                                                                                                                                                                                                                                                                                                                                          GTAAAAAAAAAAA 1683
                                                                                                                                                                                                                                                                                                                                                                    1830 GTAAAAAAAAAAA 1844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AF144103.1 GI:5059165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             gene="NJAC"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8. .307
/gene="NJAC"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ното варіеля
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Same.
                                                    1369
                                                                                                                                                                                                                                                                                                                                            1669
                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 7
AF144103
LOCCUS
DEFINION
ACCESSION
VERSION
KEYWORDS
SOUNCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORIGIN
```

```
1035
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTGTGATGGGGGAGACAAATGATCCTTAAAGAAGGTGTGGGGGTCTTTCCCAACCTGAGGAT 1215
                                                                                                                                                                                                                            256 GCGTGTGGACGGGTCCAAATGCAAGTGCTCCCGGAAGGGACCCAAGATCCGCTACAGGA 315
                                                                                                                                                                                                                                                                                 61 GCGTGTGGACGGGTCCAAATGCAAGTGCTCCCGGAAGGGACCCAAGATCCGCTACAGCGA 120
                                                                                                                                                                                                                                                                                                                                            316 CGTGAAGAAGCTGGAAATGAAGCCAAAGTACCCGCACTGCGAGAGAAGATGGTTATCAT 375
                                                                                                                                                                                                                                                                                                                                                                              435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1036 CAAGCAGGAGCAGGTCTCTGCATCTGTTCTCTGAGGAACTCAAGTTTGGTTGCCAGAA 1095
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAATGTGCTTCATTCCCCCCTGGTTAATTTTTACACCCTAGGAAACATTTCCAAGATC 1155
                                                                                                               196 GGTCAGCATGAGGCTCCTGGCGGCCGCGCTGCTCCTGCTGCTGGCGCTGTACACCGC 255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                401 CITICITICICACAGGCAIAAGACACAAAITICIATATIGITATGAAGCACTITITACCAA 460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          735
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241 GAGCACCAAGCGCTTCATCAAGTGGTACAACGCCTGGAACGAGAAGCGCAGGGTCTACGA 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301 AGAATAGGGTGAAAAACCTCAGAAGGGAAAACTCCAAACCAGTTGGGGAGACTTGTGCAAA 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                616 CITICITICICACAGGCATAAGACACAAATTATATATATGTTATGAAGCACTTTTTACCAA 675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       855
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       915
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   975
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        641 TAAGCGCCCGGGAGGAACAATGAGCTTGGTGGACACTTTCATTGCAGTGTTGCTCCATT 700
                                                                                                                                                           436 GAGCACCAAGCGCTTCATCAAGTGGTACAACGCCTGGAACGAGAAGCGCAGGGTCTACGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         521 TCTTGTGCTCCAGACTTCATCACAGGCTGCTTTTTATCAAAAAGGGGAAAAACCTCATGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  761 TCCTGGGCTTTATGGCCGGTCACAGCCTCAGTGAGCTCCACAGTGGCCCCTGTAGCCGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               821 CAAGCAGGAGCAGGTCTCTGCATCTGTTCTCTGAGGAACTCAAGTTTGGTTGCCAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           496 AGAATAGGGTGAAAAACCTCAGAAAGGGAAAACTCCAAAACCAGTTGGGGAGACTTGTGCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CGGTCAGTTTTTACATTTTATAGCTGCGTGCGAAAGGCTTCCAGATGGGAGACCCCATCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         461 CGGTCAGTITITACATTITATAGCTGCGGTGCGAAAAGGCTTCCAGATGGGAGACCCATCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       796 ITCCTTTTTAAAAATGCTTTTTTTTTTTTTTTCATACGTCACTATACATCTGAGCTTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         581 TICCTITITAAAAAAGGCTITITITGCATITGTCCATACGTCGCTATACATCTGAGCTTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   916 CCTAGCTTGGGAAGCTTCCGCTTAGAGGTCCTGGCGCCTCGGCACAGCTGCCACGGGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCTTGTGCTCCAGACTTCATCACAGGCTGCTTTTTATCAAAAAGGGGAAAAACTCATGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TAAGCGCCCGGGAAGAACAATGAGCTTGGTGGACACATTTCATTGCAGTGTTGCTCCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     701 CCTAGCTTGGGAAGCTTCCGCTTAGAGGTCCTGGCGCCTCGGCACAGCTGCCACGGGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                976 TCCTGGGCTTATGGCCGGTCACAGCCTCAGTGTGACTCCACAGTGGCCCCTGTAGCCGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  881 AAATGTGCTTCCCCCCCGGGTAATTTTTACACACCCTAGGAACATTTCCAAGATC
                                                              Gaps
                                                              20;
Query Match 85.1%; Score 1433.2; DB 9; Length 1503; Best Local Similarity 98.5%; Pred. No. 5.7e-284; Matches 1465; Conservative 0; Mismatches 3; Indels 20;
```

source

```
1001 TTCTGAAAGGTTCACAGGTTCAATATTTAATGCTTCAGAAGCATGTGAGGTTCCCAACAC 1060
                                                                            1061 TGTCAGCAAAAACCTTAGGAGAAAACTTAAAAATATATGAATACATGGGGAATACACAGC 1120
                                                                                                                                                 1180
                                                                                                                                                                                                                             1396 CAACAGAACATGCAGTACTAAAGCAATATATTTGTGATTCCCCATGTAATTCTTCAATGT 1455
                                                                                                                                                                                                                                                                1181 CAACAGAACATGCAGTACTAAAGCAATATATTTGTGATTCCCCATGTAATTCTTCAATGT 1240
                                                                                                                                                                                                                                                                                                       1456 TARACAGIGCAGICCICITICGAAAGCIAAAGAIGACCAIGCGCCCTITCCICIGIACAIA 1515
                                                                                                                                                                                                                                                                                                                              TACCCTTAAGAACGCCCCCCTCCACACTGCCCCCCAGTATATGCCGCATTGTACTGCTG 1575
                                                                                                                                                                                                                                                                                                                                                                                                                      1301 TACCCTTAAGAACGCCCCCCCCACACACTGCCCCCAGTATATGCCGCATTGTACTGCTG 1360
                                                                                                                                                                                                                                                                                                                                                                                                                                                           1361 rdriarardchardrachrercadaadccarraccarrecardcadcaccirrcararrerr 1420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AC034206 108123 bp DNA linear PRI 20-JUL-2001
Homo sapiens chromosome 5 clone CTC-321K16, complete sequence.
AC034206
  TICTGAAAGGIICACAGGIICAAIAITIAAIGCIICAGAAGCAIGIGAGGIICCCAACAC 1275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Submitted (05-APR-2000) Production Sequencing Facility, DOE Joint decome Institute, 2800 Mitchell Drive, Walnut Creek, CA 94598, USA (Dases 1 to 108123) (Dases 1 to 108123) DOE Joint Genome Institute and Stanford Human Genome Center.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Direct Submitted (20-JUL-2001) DOE Joint Genome Institute, 2800 Mitchell Direct Submitted (20-JUL-2001) DOE Joint Genome Institute, 2800 Mitchell Draft Submitted (20-JUL-2001) DOE Joint Genome Institute, 2800 Mitchell Draft Sequence Produced by DOE Joint Genome Institute

Www.jdi.doe.gov

Www.jdi.doe.gov

Www.shgc.stanford.edu
Quality: Phrap Quality >=40 99.5% of Sequence,
Estimated Total Number of Errors is 0.2.

STS Content:
SHGC-130469 G59717.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Direct Submission
Submitted (21-JUN-2001) DOE Joint Genome Institute, 2800 Mitchell
Drive, Walnut Creek, CA 94598, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammaliai, Euthenia, Primates; Catarrhini, Hominidae, Homo.
1 (bases 1 to 108123)
DOE Joint Genome Institute and Stanford Human Genome Center.
                                                                                                                                                                            4 (bases 1 to 108123)
DOE Joint Genome Institute and Stanford Human Genome Center.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2 (bases 1 to 108123)
DOE Joint Genome Institute.
Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AC034206.4 GI:14518406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Direct Submission
Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Home sapiens
                                                                            1276
                                                                                                                                                                                                                                                                                                                                                                                 1516
                                                                                                                                                                                                                                                                                                                                                                                                                                                         1576
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AC034206/c
LOCUS
DEFINITION
ACCESSION
VERSION
VERSION
VERYORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
AUTHORS
TITLE
JOURNAL
REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMMENT
ò
                            ď
                                                                       8 8 8
                                                                                                                                                                            엄
                                                                                                                                                                                                               8 8
                                                                                                                                                                                                                                                                                                 8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                          qq
                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ρp
```

```
17579 CCCAGGGTCTACGAAGAATAGGGTGAAAAACCTCAGAAGGGAAAAACTCCAAACCAGTTGG 17520
                                                                                                                                                                                                                                                                                                                                    17341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17160 AGTGTTGCTCCATTCCTAGCTTGGGAAGCTTCCGCTTAGAGGTCCTGGCGCCTCGGCACA 17101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          16981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1690 GAGGTTCCCAACACTGTCAGCAAAAACCTTAGGAGAAAACTTAAAAATATATGAATACAT 16741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17340 GGGAGACCCATCTCTCTGTGCTCCAGACTTCATCACAGGCTGCTTTTTATCAAAAAGGG 17281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17100 Gergecheceseerereerseserranseecesreaceaecreasrearsreaerecaesers 17041
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16920 ACATTTCCAAGATCCTGTGATGGCGAGACAAATGATCCTTAAAGAAGGTGTGGGGTCTTT 16861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1022 CCCCTGTAGCCGGGCAAGCAGGAGCAGGTCTCTCTGCATCTGTTCTCTGAGGAACTCAAG 1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1082 TITGGITGCCAGAAAATGTGCTTCATTCCCCCCCGGTTAATTTTTACACACCCTAGGAA 1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1202 CCCAACCTGAGGATTTCTGAAAGGTTCACAGGTTCAATATTTAATGCTTCAGAAGCATGT 1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1262 GAGGTTCCCAACACTGTCAGCAAAAACCTTAGGAQAAAACTTAAAAATATATGAATACAT 1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1322 GCGCAATACACAGGTACAGACACACATTCTGTTGACAAGGGAAAAACCTTCAAAGCATGTT 1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1382 TCTTTCCCTCACCACAACAGAACATGCAGTACTAAAGCAATATATTTGTGATTCCCCATG 1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     782 GAAAACTCATGCCTTTTTTAAAAAATGCTTTTTTGTATTTGTCCATACGTCACTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17040 CCCCTGTAGCCGGGCAAGCAGGAGCAGTCTCTCTGCATCTGTTCTCTGAGGAACTCAAG
                                                                                                                                                                                                                                  482 CGCAGGGTCTACGAAGAATAGGGTGAAAAACCTCAGAAGGGAAAACTCCAAACCAGTTGG
                                                                                                                                                                                                                                                                                                                                                                                      602 AAAAAAAAAAAAGCCTTTCTTTCTCACAGGCATAAGACACAAATTATATTGTTATGAA
                                                                                                                                                                                                                                                                                                                                                                                                                    17220 ACATCTGAGCTTTATAAGCGCCCGGGAGGAACAATGAGCTTGGTGGACACATTTCATTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             902 AGTGTTGCTCCATTCCTAGCTTGGGAAGCTTCCGCTTAGAGGTCCTGGCGCCTCGGCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCTGCCACGGCTCTCCTGGCCTTATGGCCGGTCACAGCCTCAGTGTGACTCCACAGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1142 ACATTTCCAAGATCCTGTGATGGCGAGACAAATGATCCTTAAAGAAGGTGTGGGGGTCTTT
                                                                                                                                                                                                                                                                                                           662 GCACTITITACCAACGGTCAGTITITACATTITATAGCTGCGTGCGAAAGGCTTCCAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             722 GGGAGACCCATCTCTCTTGTGCTCCAGACTTCATCACAGGCTGCTTTTTATCAAAAGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  842 ACATCTGAGCTTTTATAAGCGCCCGGGAAGAACAATGAGCTTGGTGGACACATTTCATTGC
                                                                                                                                                                                            1; Gaps
                                                                                                                                                  70.0%; Score 1179.2; DB 9; Length 108123; 99.7%; Pred. No. 1.8e-231; cive 0; Mismatches 3; Indels 1; G
1. .108123
/organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"
/chromosome="5"
/clone="CTC-321K16"
                                                                                                                                                                                          Matches 1192; Conservative
                                                                                                                                                                         Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         962
                                                                                                                                                      Query Match
                                                                                                                 ORIGIN
                                                                                                                                                                                                                                                                   8
R
                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                               ద
                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
```

```
.
.
~ ~
                                                           .0
                                            Ä
```

/rpt\_family="MLT1"

																														·	exon, irame 2"		exon, frame 1"							exon, frame 2"
rpt_ramily>	4406744382 /rpt_family="Alu"	459244 rpt famil	521345338 rrt family~"[]	7645708	_family="A 447235	t family 15510	rpt_family	family="MIR"	ement(519605210 family≈"MIR"	ement(5 familv=	ement (5	2752	53050	'="Alu 53346	"MER7" 5100	"L1" 5478 SSE	n n	complement (56376, .56704) /rot familv="1,1"	57025. 57175	/ rpc_ramily="Mill" n complement(58128, .58416)	/rpt_ramily="Aiu" complement(5860358884)	/rpt_family="L1" 5941659747	/rpt_family="MER21" complement(6055360710)		complement(6071860914)	complement (61908, .62249)	complement (62279, .63781)	complement (63786, .64160)	/rpc_ramily="imbi" 6549165778	113)	excellent	ramily="Thei" ement (68013.	"GRAIL 2 excellent68651	rpt 889	rpt_family="THE1"	omp] rpt	05677088	Tamily="Alu Tement (72274	rpt_ramily="Alu" omplement(74449, .74802)	-"GRAIL 2 excellent
-	1	repeat_region	repeat_region	repeat_region	at Ir		at regi	, .	- 1	repeat_region	repeat_region	repeat_region	repeat_region	repeat_region	at region	region	5	repeat_region	repeat_region	repeat_region	repeat_region	repeat region	- c	1	repeat_region	repeat_region	repeat_region	repeat_region	repeat_region	misc_feature	repeat_region	misc_feature	repeat region	L red	}	repeat_region	repeat_region	repeat_region	misc_feature	

110706 722 GGGAGACCCATCTTCTTGTGCTCCAGACTTCATCACAGGCTGCTTTTTATCAAAAGGG 781
110885 GGGAGACCCATCTCTTGTGCTCCAGACTTCATCACAGGCTGCTTTTATCAAAAAGGG 110826 110405 CCCAACCTGAGGATTTCTGAAAGGTTCACAGGTTCAATATTTAATGCTTCAGAAGCATGT 110346 111123 CCCAGGGTCTACGAAGAATAGGGTGAAAAACCTCAGAAGGGAAAACTCCAAACCGAAACTGG 111064 110525 TTTGGTTGCCAGAAAAATGTGCTTCATTCCCCCCTGGTTAATTTTTACACACCCTAGGAA 110466 110285 GCGCAATACACAGCTACAGACACACACTTCTGTTGACAAGGGAAAACCTTCAAAGCATGTT 110226 1021 1022 CCCCTGTAGCCGGGCAAGCAGGAGCAGGTCTCTCGCATCTGTTCTCTGAGGAACTCAAG 1081 1142 ACATTICCAAGAICCIGIGAIGGCGAGACAAAIGAICCITAAAGAAGGIGIGGGGICTIT 1201 1202 CCCAACTGAGGATTCTGAAAGGTTCACAGGTTCAATATTTAATGCTTCAGAAGCATGT 1261 1262 GAGGTTCCCAACACTGTCAGCAAAAACCTTAGGAGAAAACTTAAAAATATATGAATACAT 1321 1322 GCGCAATACACAGCTACAGACACATTCTGTTGACAAGGGAAACCTTCAAAGCATGTT 1381 601 1082 TTTGGTTGCCAGAAAATGTGCTTCATTCCCCCCTGGTTAATTTTTACACACCCTAGGAA 1141 661 1442 TAATTCTTCAATGTTAAACAGTGCAGTCCTCTTTCGAAAGCTAAGATGACCATGCGCCCT 1501 841 482 CGCAGGGTCTACGAAQAATAQGGTGAAAAACCTCAGAAGGGAAAACTCCAAACCACTTGG 782 GAAAACTCATGCCTTTCCTTTTAAAAAIGCTTTTTGTATTTGTCCATACGTCACTAT 110765 ACATCTGAGCTTTATAAGCGCCCGGGAGGAACAATGAGCTTGGTGGACACATTTCATTGC 902 AGTGTTGCTCCATTCCTAGGTAGGTTCCGCTTAGAGGTCCTGGCGCCTCGGCACA 842 ACATCTGAGCTTTATAAGCGCCCGGGAAGAACAATGAGCTTGGTGGACACATTTCATTGC 962 GCTGCCACGGGCTCTCCTGGGCTTATGGCCGGTCACAGCCTCAGTGTGACTCCACAGTGG Query Match 69.9%; Score 1177.2; DB 9; Length 134506; Best Local Similarity 99.6%; Pred. No. 4.8e-231; Matches 1191; Conservative 0; Mismatches 3; Indels 2; Gaps 79647. .79829 /note="GRAIL 2 excellent exon, frame 2" complement (82876. .82937) misc\_feature misc\_feature a g q 8 à 8 8 ઠે 8 8 8 8 8 ò Dp 8 6 8 6 තු g ò  $\delta$ ò 쉱 ö 셤 ò 원 셤 ò ઠે

	ACO11428 ACO11428 SEQUENCE, 4 unordered pie ACO11428 ACO1143 ACO11	* 3125 3324: gap of unknown length * 3325 11887: contig of 10563 bp in length * 13888 13897: gap of unknown length * 13433 32532: gap of unknown length * 32433 32532: gap of unknown length * 32533 79970: contig of 47438 bp in length. RES Location/Qualifiers source /organism="Homo sapiens"
6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	RESULT 10 ACOL1428/C LOCUS DEFINITION ACCESSION VERSION VERSION VERSION VERSION VERSION TITLE JOURNAL TITLE JOURNAL TITLE JOURNAL TITLE JOURNAL COMMENT COMMENT	FEATURES

/mol\_type="genomic DNA"
/db xref="taxon:9606"
/chromosome="5"
/clone="XXp1-380H11"

ORIGIN

.; .;	541	18585	601	661	18467	721	18407	781	18347	841	18287	901	18227	961	18167	1021	18107	1081	18047	1141	17987	1201	17927	1261	17867	1321	17807	1381	17747	4 4	17687
79970; 2; Gaps	CAAACCAGIIG		AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	TATTGTTATGA	 TATTGTTATGA	AGGCTTCCAGAT	AGGCTTCCAGA	TATCAAAAAGGG	TATCAAAAAGGC	ATACGTCACTAT	ATACGTCACTAT	ACATTTCATTGC	ACATTTCATTG	CGCCTCGGCAC	CGCCTCGGCACA	ACTCCACAGTGC	ACTCCACAGTGC	GAGGAACTCAAG	GAGGAACTCAAG	ACACCCTAGGAA	ACACCCTAGGAA	rereeggrerr	rerecercit	TCAGAAGCATGI	rcagaagcargi	ATATGAATACAT	GAATACA	CAAAGCATGT	rcaaagcargr	CCCAT	()
B 2; Length 31; 4; Indels	AAGGGAAAACTC	AAGGGAAAACTO	CTTGTGCAAAGGACTTTGCAGATTAAAAAAAAAAAAAAA	ACACAAATTATA		SCTGCGTGCGAA	GCTGCGTGCGAA	CAGGCTGCTTTT	SAGGTGCTTTT	FIGTATITGIC	rigrarification	AGCTTGGTGGAC	AGCTTGGTGGAC	ragaggreergg	ragadgreereg	CTCCTGGGCTTATGGCCGGTCACAGCCTCAGTGTGACTCCACAGTGG	AGCCTCAGTGTG	ATCTGTTCTCT	Arcigitate	TTAATTTTTAC	STTAATTTAC	CTTAAAGAAGG	cttaaagaagg	TATTTAATGCT	TATTTAATGCT	AACTTAAAAATATAT	AACTTAAAAAT	AATACACAGCTACAGACACACATTCTGTTGACAAGGGAAAACCTTCAAAGCATGTT	AGGGAAAACCT	CCCTCACCACAACAGAACATGCAGTACTAAAGCAATATATTTGTGATTC	CAATATATTTG
1175.6; D No. 9.4e-2 smatches	AAAAACCICAG	AAAAACCTCAG	ATTAAAAAAAA     	ACAGGCATAAG		TACATTTTATAC	TACATTTATAC	AGACTTCATCAC	AGACTICATCAC	AAAATGCTTTT!	AAATGCTTTT	BAGGAACAATGA	GAGGAACAATGA	AAGCTTCCGCTT	AAGCTTCCGCTI	TGGCCGGTCACP	reeccectcaca	AGGTCTCTCTGC	AGGICICICIC	ATTCCCCCCTG	ATTCCCCCCTGC	AGACAAATGATC	AGACAAATGATC	TCACAGGTTCA	rcacaggircaa	ACCTTAGGAGAAAAC	ACCTTAGGAGAA	ATTCTGTTGACA	ATTCTGTTGACA	SCAGTACTAAAG	SCAGTACTAAAG
3%; Score 5%; Pred. 0; Mi	AGAATAGGGTG	AGAATAGGGTG	GACTTTGCAG	CTTTCTTTCTC	CTTTCTTCTC	GGTCAGTTTT	CGGTCAGTTTT	rcrrgrgcrcc	rcrididerce	TTCCTTTTTAA	riccritita	TAAGCGCCCGG	raagcgcccgg	CCTAGCTTGGG	ctagetrees	CCTGGGCTTA	rcreecria	CAAGCAGGAGC	CAAGCAGGAGC	AAATGTGCTTC	AAATGTGCTTC	CTGTGATGGCG	rereardece.	FTCTGAAAGGT7	rrcrgaaaggr	CAACACTGTCAGCAAAAC	rgtcagcaaaa	FACAGACACAC	racagacacaca	CAACAGAACATC	CAACAGAACATC
69.8 ilarity 99.9 Conservative	CAGGGTCTACGA	CCAGGGTCTACGAAGAATAGGGTGAAAAACCTCAGAAGGGAAAACT	SACTIGICCAAA	AAAAAAAAGC	Adadadadadagcctttcttctctcacggcataagacacaaatatatata	CACTITITACCAACGGTCAGTTTTTACATTTTATAGCTGCGAAAAGGCTTCCAGA	ACTTTTACCAA	GGGAGACCCATCTCTCTGTGCTCCAGACTTCATCAGGCTGCTTTTATCAAAAGG	SAGACCATOTO	GABARCTCATGCCTTTTCTTTTAAAAATGCTTTTTTTTTTTGTATTTGTCGTCACTA	AAACTCATGCCT	ACATCTGAGCTTTATAAAGCGCCCGGGAAGGAACAATGAGCTTGGTGGACACATTTCATTGC	Arcreadcrira	AGIGITGCTCCATTCCTAGCTTGGGAAGCTTCCGCTTAGAGGTCCTGGCGCCTCGGCACA	rarrecrearr	CTGCCACGGGCTC	ACGGGCT	CTGTAGCCGGG	CCCTGTAGCCGGGCAAGCAGGACCAGGTCTCTTGCATCTGTTCTTTGAGGAACCTAA	TITIGGITGCCAGAAAAATGTGCTTCATTCCCCCCTGGTTAATTTTTACACACCCTAGGAA	regridecadaa	CATTICCAAGAICCIGIGAIGGCGAGACAAAIGAICCIIAAAGGAGGIGIGGGGICIII	ATTCCAAGATC	CCAACCTGAGGATTTCTGAAAGGTTCACAGGTTCAATATTTAATGCTTCAGAAGCATGT	SAACCTGAGGAT	GAGGTTCCCAACAC	sgrrcccaacac	GCAATACACAGC	SCAATACACAGC	뒫	E⊸i .
r Match Local Simil	482 CG(	8644 CC	542 GAGAC	602	       	662 GC	8466 GC	722 GGC	8406 ĠĠ	782 GAJ	8346 GA	842 AC	8286 AC	902 AG	8226 AG	962 GCT	8166 GCT	1022 CCC	8106 CCC	1082 TT	8046 TT	1142 AC	7986 ÀCP	1202 CCC	7926 CCC	1262 GAC	7866 GAC	1322 GCC	-0	382 T	7746 TCI
Query Ma Best Loc Matches	ò	Db 1	8 8		Db 1	ò	Db 1	ζ	Db 1	δ	Db 1	ζō	D <b>b</b> 10	ζ	Db 1	oy.	11 qa	 03	Db 18	۸۵	Db 1	č	.T qa		DP 1.	č	Db 1,	 %	Dp 1,		DD 1.

17686 TAATTCTTCAATGTTAAACAGTGCAGTCTCTTTCGAAAGCTAAGATGACCATGCGCCCT 17627 17626 TECCETGTACATATACCETTAAGAAGGCCCCETCCACACACACGCCCCCCAGTATATGCC 17567 1442 TAATICIICAAIGITAAACAGIGCAGICCICTITCGAAAGCTAAGAIGACCAIGGGCCCT 1501 ACUU9017
Homo sapiens chromosome 5 clone XXp1-929G6, WORKING DRAFT SEQUENCE, 17506 GITTCATAITCTTTCTAAGAIGGAAGTAATAAAATATATTGAAAIGTACCAAAA 17451 RESULT 11 AC009017/c LOCUS DEFINITION δ 엄 ò ઠે

Eukaryota, Metazoa, Chordata, Craniata, Vertehrata, Buteleostomi, Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.

1 (bases 1 to 159420)
DOB Joint Genome Institute.
Sequencing of Human Chromosome 5 AC009017.4 GI:13699469 HTG: HTGS PHASE1; HTGS\_DRAFT; HTGS\_ACTIVEFIN. Homo sapiens (human) Unpublished 2 (bases 1 to 159420) DOE Joint Genome Institute. ACCESSION VERSION KEYWORDS SOURCE ORGANISM REFERENCE AUTHORS TITLE JOURNAL REFERENCE AUTHORS

TITLE

COMMENT

Consensus quality: 142845 bases at least Q40
Consensus quality: 150910 bases at least Q30
Consensus quality: 150910 bases at least Q30
Consensus quality: 152756 bases at least Q30
Consensus quality: 152756 bases at least Q30
Estimated insert size: 80000, pulse field gel estimation
Quality coverage: 8.41 in Q20 bases; pulse field gel estimation
Quality coverage: 4.29 in Q20 bases; pulse field gel estimation
\* NOTE: This is a working draft' sequence. It currently
\* consists of 26 contigs. The true order of the pieces
\* is not known and their order in this sequence record is
\* arbitrary. Gaps between the contigs are represented as
\* trus of N, but the exact sizes of the gaps are unknown.
\* This record will be updated with the finished sequence
\* as soon as it is available and the accession number will
\* be preserved. Direct Submission
Submitted (03-AUG-1999) Production Sequencing Facility, DOE Joint
Submitted (03-AUG-1999) Production Sequencing Facility, DOE Joint
Genome Institute, 2800 Mitchell Drive, Walnut Creek, CA 94598, USA
On Apr 20, 2001 Lhis sequence version replaced gi:11178048.
----Genome Center
Center: Joint Genome Institute
Center Code: JGI
Web site: http://www.jgi.doe.gov Center Project Name: 1189133, H51 Center clone name: XXp1-929G6 Project Information Summary Statistics

1423: contig of 1423 bp in length 1523: gap of unknown length 3166: contig of 1543 bp in length 3166: gap of unknown length 5629: contig of 2463 bp in length 5729: gap of unknown length 6797: contig of 1268 bp in length 7097: gap of unknown length

9214: contig of 2117 bp in length 9215 1914: gap of unknown length 1914 14718: contig of 2499 bp in length 1914 14718: contig of 2499 bp in length 1914 14818: gap of unknown length 14718: contig of 2856 bp in length 14718: contig of 2856 bp in length 1774: contig of 2856 bp in length 1774: contig of 2436 bp in length 1774: contig of 2436 bp in length 1779: gap of unknown length 17778: gap of unknown length 1778: gap of unknown length 1779: gap of /organism="Homo sapiens" /mol\_type="genomic DNA" /db\_xref="taxon:9606" /clone="XXp1-929G6" 9215 9215 11814 11914 11914 11914 11019 11 Query Match FEATURES ORIGIN

482 CGCAGGGTCTACGAAGAATAGGGTGAAAAACCTCCAGAAGGGAAAACTCCAAACCAGTTGG 541 69.8%; Score 1175.6; DB 2; Length 159420; 99.5%; Pred. No. 1.1e-230; Live 0; Mismatches 4; Indels 2; G Best Local Similarity 99.5 Matches 1190; Conservative

152395 CCCAGGGTCTACGAAGAATAGGGTGAAAAACCTCAGAAGGGAAAACTCCAAAACTTGG 152336 662 GCACTITITACCAACGGICAGITITIACAITITATAGCIGCGGGAAAGGCTICCAGAI 721 d ò ò 셤

722 GGGAGACCCAICTCTCTTGTGCTCCAGACTTCATCACAGGCTGCTTTTTATCAAAAGGG 781

```
81811;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ٠,
ښ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              69.1%; Score 1163.6; DB 2; ilarity 99.4%; Pred. No. 2.8e-228; Conservative 0; Mismatches 4; I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1. .81811
/organism="Homo sapiens"
/organisy="genomic DNA"
/db_xref="taxon:9606"
/chromosome="5"
/clone="XXp1-766F5"
                                                                                                                                                                                                                                 Project Information
Center Project Name: 1189125, H199
Center clone name: XXp1-766F5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                                                       Summary Statistics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Simi:
Matches 1189; (
ORGANISM
                                    REFERENCE
AUTHORS
TITLE
JOURNAL
REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                        COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             902 AGTGTTGCTCCATTCCTAGCTTGGGAAGCTTCCGCTTAGAGGTCCTGGCGCCTCGGCACA 961
151977 AGTATTGCTCCCATTCCTAGCTTGGGAAGCTTCCGCTTAGAGGTCCTGGGGCCTCGGCACA 151918
                                                                                                                                                                                                            B1811 bp DNA linear HTG 02-SEP-2000 Homo sapiens chromosome 5 clone XXpl-766F5, WORKING DRAFT SEQUENCE, AC061981 AC063981.2 GI:9964804 HTG; HTGS_PHASE2; HTGS_DRAFT. HOMO sapiens (human)
                                                                                                                                                                                                                                                                       CCCCTGTAGCCGGGCAAGCAGGAGGAGGTCTCTCTGAACTCTGTAGAAGAACTCAAG 151798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 151438
                                                                                                        152157 GGGAGACCCATCTCTCTGTGCTCCAGACTTCATCACAGGCTGCTTTTTATCAAAAGGG 152098
                                                           152097 GAÁAÁCICAIGCCITICCITITIAAAAAAGCITITITITITIGICCATACGICACTAI 152038
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1382 TCTTTCCCTCACACACACATGCAGTACTAAAAGCAATATATTTGTGATTCCCCATG 1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TICCICIGIACATATACCCTIAAGAACGCCCCCTCCACACACTGCCCCAGTATATGCC 1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITGGITGCCAGAAAATGTGCTTCATTCCCCCTGGTTAATTTTTACACACCCTAGGAA 1141
                                                                                                                                                                                                                                                                                                                                                         ACATTTCCAAGATCCTGTGATGGCGAGACAAATGATCCTTAAAGAAGGTGTGGGGTCTTT 1201
                                                                                                                                                                                                                                                                                                                                                                                                             1202 CCCAACCTGAGGATTTCTGAAAGGTTCACAGGTTCAATATTTAATGCTTCAGAAGCATGT 1261
                                                                                                                                                                                                                                                   CCCCTGTAGCCGGGCAAGCAGGAGCAGGTCTCTCTGCATCTGTGTGAGGAACTCAAG 1081
                                                                                                                                                                                               GCTGCCACGGGCTCTCCTGGGCTTATGGCCGGTCACAGCCTCAGTGTGACTCCACAGTGG 1021
                                                                                          901
                                        841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     151257 GTTTCATATTCTTTCTAAGATGGAAAGTAATAAAAATATATTTGAAATGTACCAAAA 151202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTTTCATATTCTTTCTAAGATGGAAGTAAAAATATATTTTGAAATGTAAAAAA 1677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TAATTCTTCAATGTTAAACAGTGCAGTCCTCTTTCGAAAGCTAAGATGACCATGCGCCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1262 GAGGITCCCAACACTGTCAGCAAAAACCTTAGGAGAAAAACTTAAAAATATATGAATACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1322 GCGCAATACACACACACACACATTCTGTTGACAAGGGAAAACCTTCAAAGCATGTT
                                                                                           ACATCTGAGCTTTATAAGCGCCCGGGAGGAACAATGAGCTTGGTGGACACATTTCATTGC
                                        GAAAACTCATGCCTTTTCCTTTTTAAAAATGCTTTTTTTGTATTTGTCCATACGTCACTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1562
                                                                                              842
                                                                                                                                                                                                   962
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1622
                                           782
                                                                                                                                                                                                                                                                              151857
                                                                                                                                                                                                                                                        1022
                                                                                                                                                                                                                                                                                                          1082
                                                                                                                                                                                                                                                                                                                                                              1142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 12
AC063981/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                원
                                                                                                                    엄
                                                                                                                                                                       g
                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                              ∂
                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                             \delta
                                                                                                                                              ò
                                                                                                                                                                                                     8
                                           ઠે
```

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Eukaryota; Metazoa; Chordata; Catarrhini; Hominidae; Homo.

(bases 1 to 81811)

DoE Joint Genome Institute.

Sequencing of Human Chromosome 5

Unpublished

Unpublished

Losses 1 to 81811)

E Chases 1 to 81811)

DoE Joint Genome Institute.

DoE Joint Genome Institute.

Losses 1 to 81811)

Submitted (22-RPR-2000) Production Sequencing Facility, DOE Joint Genome Institute, 2800 Mitchell Drive, Walnut Creek, CA 94598, USA On Sep 2, 2000 this sequence version replaced gi:7636394.

Center: Joint Genome Institute

Center: Joint Genome Institute

Center Code: JGI

Web site: http://www.jgi.doe.gov Summary Statistics 18

Summary Statistics 18

Consensus quality: 79224 bases at least Q40

Consensus quality: 79224 bases at least Q30

Consensus quality: 80246 bases at least Q30

Estimated insert size: 81361; sum-of-contigs estimation

Quality coverage: 5.65 in Q20 bases; pulse field gel estimation.

\*\*NOTE: This is a "working draft' sequence. It currently

\*\*Consists of I contigs. Gaps between the contigs

\*\*are represented as runs of N. The order of the pieces

\*\*are represented as runs of N. The order of the pieces

\*\*are represented as runs of N. The order of that have

\*\*provided by the submittor.\*\*

\*\*Pris sequence will be replaced

\*\*Pris sequence will be preserved.

\*\*This sequence will be preserved.

\*\*At a coession number will be pres 3 Gaps

60-81

1054 1234 1191 1354 1311 1371 1474 1551 952 CACAGCCTCAGTGTGACTCCACAGTGGCCCCTGTAGCCGGGCAAGCAGGAGCAGGTCTCT 1011 CTGCATCTGTTCTCTGAGGAACTCAAGTTTGGTTGCCAGAAAATGTGCTTCATTCCCCC 1114 1012 CTGCATCTGTCTCTGTGAGGAACTCAAGTTTGGTTGCCAGAAAATGTGCTTCATTCCCCC 1071 CTGGTTAATTTTTACACACCCTAGGAACATTTCCAAGATCCTGTGATGGCGAGACAAAT 1174 1072 cregrraartriracacacccraegaaacarriccaagarccrerereareeceaeaar 1131 1235 TCAATATTTAATGCTTCAGAAGCATGTGAGGTTCCCAACACTGTCAGCAAAAACCTTAGG 1294 1192 TCAATATTTAATGCTTCAGAAGCATGTGAGGTTCCCAACACTGTCAGCAAAAACCTTAGG 1251 1355 GACAAGGGAAAACCTTCAAAGCATGTTTCTTTCCCTCACCACAACAGAACATGCAGTACT 1414 1372 AAAGCAATATTTTGTGATTCCCCATGTAATTCTTCAATGTTAAACAGTGCAGTCCTCTT 1431 1475 TCGAAAGCTAAGATGACCATGCGCCCTTTCCTCTGTACATATACCCTTAAGAACGCCCCC 1534 1432 TCGAAAGCTAAGATGACCATGCGCCCTTTCCTCTGTACATATACCCTTAAGAAGCCCCC 1491 1535 TCCACACACTGCCCCCCAGTATATGCCGCATTGTACTGCTGTGTTATATGCTATGTACAT 1594 754 874 831 934 891 994 951 711 814 771 772 TITITGTATITGTCCATACGTCACTATACATCTGAGCTTTATAAGCGCCCGGGAGGAACA TITITGIALTIGICCALACGICACIATACALCIGAGCITITALAAGCGCCCGGGAGGAACA 832 ATGAGCTTGGTGGACACATTTCATTGCAGTGTTGCTCCATTCCTAGCTTGGGAAGCTTCC 892 GCTTAGAGGTCCTGGCGCCTCGGCACACGCTGCCACGGGCTCTCCTGGGCTTATGGCCCGT 1175 GATCCTTAAAGAAGGTGTGGGGGTCTTTCCCAACCTGAGGATTTCTGAAAGGTTCACAGGT 1295 AGAAAACTTAAAAATATATATGAATACATGCGCAATACACAGCTACAGACACATTCTGTT ATAGCTGCGTGCGAAAGGCTTCCAGATGGGAGACCCCATCTCTCTTGTGCTCCAGACTTCA 652 ATAGCTGCGTGCGAAAGGCTTCCAGATGGGAGACCCATCTCTTGTGCTCCAGACTTCA TCACAGGCTGCTTTTTATCAAAAGGGGAAAACTCATGCCTTTCCTTTTTAAAAATGCT ATGAGCTTGGTGGACACATTTCATTGCAGTGTTGCTCCATTCCTAGCTTGGGAAGCTTCC 935 GCTTAGAGGTCCTGGCGCCTCGGCACAGCTGCCACGGGCTCTCCTGGGCTTATGGCCGGT 1132 GATCCTTAAAGAAGGTGTGGGGTCTTTCCCAACCTGAGGATTTCTGAAAGGTTCACAGGT 1492 TCCACACACACTGCCCCCAGTATATGCCGCATTGTACTGCTGTGTTATATGCTATGTACAT CACAGCCTCAGTGTGACTCCACAGTGGCCCCTGTAGCCGGGCAAGCAGGAGCAGGTCTCT 1312 GACAAGGGAAAACCTTCAAAGCATGTTTCTTTCCCTCACCACAACAAGAACATGCAGGAACT 1415 AAAGGATATATTTGTGATTCCCCATGTAATTCTTCAATGTTAAACAGTGCAGTCTTTT

```
1535
                                1055
                                                                                                                                                                                                                                                                                                                                                          g
                                                                               ઠે
                                                                                                                   셤
                                                                                                                                              ò
                                                                                                                                                                        g
                                                                                                                                                                                                          8 6
                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                            ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                         ઠે
                                                   ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                            Human nucleic acid sequence originating in endometrial tumor tissue
Patent: JP 2002532055-A 59 02-OCT-2002;
METAGEN GESELLSCHAFT FUER GENOM FORSCHUNG MBH
BD206300 1630 bp DNA linear PAT 17-JUL-2003 Human nucleic acid sequence originating in endometrial tumor
                                                                                                                                                                                                                                                                                                                                                              C12N15/09, A61K38/00, A61K48/00, C07K14/47, C07K16/18, C12N5/10, PC
                                                                                                                                                                                                                                      Homo sapiens (human)
JP 2002532055-A/59
02-OCT-2002
15-APR-1999 JP 2000544793
17-APR-1998 DE 198 17 948 0
THOMAS SPECHT, BERND HINZMANN, ARMIN SCHMITT, CHRISTIAN PILARSKY, ANDRE ROSENTHAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CACAGCCTCAGTGTGACTCCACAGTGGCCCCTGTAGCCGGGCAAGCAGGAGCAGGTCTCT 1054
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    634
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          651
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      754
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  814
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       934
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              951
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             635 AAGACACAAATTATATATTGTTATGAAGCACTTTTTACCAACGGTCAGTTTTTACATTTT 694
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   652 ATAGCTGCGTGCGAAAGGCTTCCAGATGGGAGACCCATCTCTTGTGCTCCAGACTTCA 711
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             712 TCACAGGCTGCTTTTTATCAAAAAGGGGAAAACTCATGCCTTTCCTTTTAAAAAATGCT 771
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITITGIATITGICCATACGICACTATACATCTGAGCTTTATAAGCGCCCGGGAGGAACA 874
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           831
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 1630)
                                                                                                                                                                                                                                                                                                                                                                                         PC C12P21/08,C12Q1/68,C12N15/00,A61K37/02,C12N5/00 CC Human nucleic acid sequence originating in endometrial tumor CC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    592 AAGACACAAATTATATATATATGAAGCACTTTTTACCAACGGTCAGTTTTTACATTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      695 ATAGCTGCGAGAAGGCTTCCAGATGGGAGACCCATCTCTTGTGCTCCAGACTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              772 TITITGETATITGETCATACGTCACTATACATCTGAGCTTTATAAGGCGCCCGGGAAGAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       875 ATGAGCTTGGTGGACACATTTCATTGCAGTGTTGCTCCATTCCTAGCTTGGGAAGCTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCTTAGAGGTCCTGGCGCCTCGGCACGCCACGGGCTCTCCTGGGCTTATGGCCGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           892 GCTTAGAGGTCCTGGCGCTCGGCACAGCTGCCACGGGCTCTCCTGGGCTTATGGCCGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  755 TCACAGGCTGCTTTTTATCAAAAGGGGAAAACTCATGCCTTTCCTTTTTAAAAATGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Gaps
                                                                                                                                                             Specht, T., Hinzmann, B., Schmitt, A., Pilarsky, C., Dahl, E. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       64.8%; Score 1092.2; DB 6; Length 1630; 99.7%; Pred. No. 6.9e-214; ive 0; Mismatches 3; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
1. .1630
/organism='Homo sapiens (human)'.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1. .1630
/organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"
                                                        BD206300.1 GI:33016070
JP 2002532055-A/59.
Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity 99.78
Matches 1094; Conservative
                                                                                                                                                                             Rosenthal, A.
                                                                                                                                                                                                                                                                                                                                                                               C12P21/02,
                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                         달달
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            815
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 935
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           995
                                                       VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   source
            DEFINITION
                                                                                                                                              REFERENCE
AUTHORS
                                                                                                                                                                                          TITLE
JOURNAL
                                        ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                       COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               \dot{\delta}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
```

```
1191
                                                                                                                                                                                                                                                                                                                                                                                                            1294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1534
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1474
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1491
                                                                                                                                                                                                       1492 recacacaciececececagnararecesarineraciecienerarararecara 1551
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1595 GTCAGAAACCATTAGCATTGCAFGCAGGTTTCATATTCTTAAGATGGAAAGTAATAA 1654
                                                                                                                                                                                                                                                                                                                                                                                                                                              1192 TCAATATTTAATGCTTCAGAAGCATGTGAGGTTCCCAACACTGTCAGCAAAAACCTTAGG
                                                     CIGCAICTGITCTCTGAGGAACTCAAGTTTGGTTGCCAGAAAAATGTGCTTCATTCCCCC
                                                                                               1012 CIGCATCIGITCICTCTGAGGAACTCAAGTTIGGTTGCCAGAAAAATGIGCTTCATTCCCCC
                                                                                                                                                                                                                                                                                                                            1312 GACAAGGGAAAACCTTCAAAGCATGTTTCCCTCACCACCACAACAAGAACATGCAGTACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1372 AAAGCAATAIATITIGIGAITCCCCAIGIAATICITCAAIGITAAACAGIGCAGTCCTCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1475 TCGAAAGCTAAGATGACCATGCGCCCTTTCCTCTGTACATATACCCTTAAGAACGCCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1432 TCGAAAGCTAAGATGACCATGCGCCCTTTCCTCTGTACATATACCCTTAAGAACGCCCCC
952 CACAGCCTCAGTGTGACTCCACAGTGGCCCCTGTAGCCGGGCAAGCAGGAGCAGGTCTCT
                                                                                                                                                                           1115 CTGGTTAATTTTTACACACCCTAGGAAACATTTCCAAGATCCTGTGATGGCGAGACAAAT
                                                                                                                                                                                                                                                                                             1175 GATCCTTAAAGAAGGTGTGGGGTCTTTCCCAACCTGAGGATTTCTGAAAGGTTCACAGGT
                                                                                                                                                                                                                                                                                                                                                                                                            1235 TCAATATTTAATGCTTCAGAAGCATGTGAGGTTCCCAACACTGTCAGCAAAAAACCTTAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1252 AGAAAACTTAAAAATATGAATACATGCGCAATACACAGCTACAGACACACATCTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1355 GACAAGGGAAAACCTTCAAAGCATGTTTCTTTCCCTCACCACAACAGAACATGCAGTACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCCACACACTGCCCCCCAGTATATGCCGCATTGTACTGCTGTGTTATATGCTATGTACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1415 AAAGCAATATATTTGTGATTCCCCATGTAATTCTTCAATGTTAAACAGTGCAGTCCTCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Search completed: April 26, 2004, 07:33:05
Job time : 6728 secs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1655 AATATATTTGAAATGTA 1671
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1612 AATATATTTGAAATGTA 1628
```

## GenCore version 5.1.6 Copyright (c) 1993 - 2004 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Sequence: l geggagacaagegeagageg.... Scoring table: IDENTITY\_NUC Gapop 10.0 , Gapext 1.0

Searched: 682709 segs, 277475446 residues

Total number of hits satisfying chosen parameters: 1365418

Minimum DB seg length: 0 Maximum DB seg length: 2000000000 Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries 1: /cgn2\_6/ptodata/2/ina/5A\_COMB.seq:\*
2: /cgn2\_6/ptodata/2/ina/5B\_COMB.seq:\*
3: /cgn2\_6/ptodata/2/ina/6A\_COMB.seq:\*
4: /cgn2\_6/ptodata/2/ina/6B\_COMB.seq:\*
5: /cgn2\_6/ptodata/2/ina/6B\_COMB.seq:\*
6: /cgn2\_6/ptodata/2/ina/PcTUS\_COMB.seq:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

11,000	-		,				
10 T	No.	Score	Match :	Length	DB	ан	Description
{	-	1449.2	0 98	1 4	1 4		Seminance 225
	1 (7)	1092.2	. 4	63	4	-09-673-395A-5	9
	m	976.2	57.9	1962	4,	-09-673-395A-5	Sequence 541, App
υ	4	872.6	H	96	4	3-3	541,
	Ŋ	727.2	س	1663	4	-09-312-2	equence 370,
	9	727.2	ო	99	4	-09-312-28	equence 416,
	7	448	9	764	m	-09-188-930-26	equence 263,
	œ	448	Ģ.	764	4	-724-864	,99
	σ	4	ů.	764	4	-09-312-28	equence 263
	10	435.6	'n.	461	C)	-825-55	H
	11	ъ.	5.	461	4	-238-184-	equence 1,
	12	2	25.3	166	m	8-93	38
	13	2	'n	166	4	2-283C-	38
υ	14	•	20.9	1630	4	-09-673-395A-	53
	15	288	17.1	288	ო	8-93	Sequence 270, App
	16	œ	17.1	288	4	9-724-86	67
	17	œ		288	4	US-09-312-283C-270	27
	18	m	13.9	234	m	US-09-188-930-272	27
	19	m	13.9	234	4	US-09-724-864-71	7
	20	m	13.9	234	4	-09-312-283C-	Sequence 272, App
	21	4	ά.	234	m	-188-93	27
	22	₹.	12.7	234	4	4-6	69
	23	214.8	ď	234	4	.09-312-28	equence 271,
O	24	70.6	4.2	7218	٦	US-08-232-463-14	Sequence 14, Appl
	25	57.2	٠.	443	4,	-03-621-976-	1763
	56	٠	3.3	231	4	-09-621-976-1631	1631
	27	56.2	3.3	242	4	US-09-621-976-16320	1632

Sequence 16124, A Sequence 17, Appl Sequence 17, Appl Sequence 24, Appl Sequence 29, Appl Sequence 5, Appl Sequence 158, Appl Sequence 158, Appl Sequence 188, Appl Sequence 1848, Appl Sequence 18, Appl Sequence 17, Appl Sequence 29, Appl
US-09-621-976-16324 US-09-007-005-17 US-09-344-796-17 US-08-324-796-17 US-08-520-678A-29 US-08-520-678A-29 US-09-907-944-158 US-09-907-794A-158 US-09-907-794A-158 US-09-907-794-158 US-09-621-976-186 US-09-621-976-186 US-09-248-135-25 US-09-248-105-17 US-09-441-06-17
せうううこうこくせいせいせい まりしょし
242 289 2230 2230 260 260 11077 1777 1777 1777 1777 1777 1777 1
N N N N N N N N N N N N N N N N N N N
00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

## ALIGNMENTS

DB 4; Length 1865;

86.0%; Score 1449.2;

Query Match

Db 1170 AGTGGCCCTGTAGCCGGGCAAGCAGCAGGTCTCTCTGCATCTGTTCTCTGAGGAAC 1229  Qy 1077 TCAAGTTGGTTGCTAGAAAATGTGCTTCATCCCCCTGGTTAATTTTAACACACCT 1136	Db 1290 TAGGSAACHTTCCAAGGATCTTGTGATGGCGAGACAATGATCCTTAAAGGAGTGT 1349  Qy 1193 GGGGTCTTTCCCAACCTGAGGATTTCTGAAAGGTTCACAGGTTCAATATTTAATGC 1248	1249 TTCAGAAGCATGTGAGGTTCCCAACACTGTCAGCAAAAACCTTAGGAGAAAACTTAAAAA	1309 TATATGAATACATGGGCAATACACAGGCTACAGACACACTTCTGTTGACAAGGGAAAACC	1369 TTCAAAGCATGTTTCTTTCCCTCACCACAACAAGCAGTGCAGTACTAAGCAATATTTTTTTT	1429 GIGATICCCATGTAATICTTCAATGTTAAACAGTGCAGTCCTCTTTCGAAGGTAGAGT 1	1489 GACCATGCGCCTTTCCTCTGTACATATACCCTTAAGAACGCCCCTCCACACACTGCCC 1		GCATTGCATGCAGGTT	Oy 1669 GTRAAARAAA 1683 	RESULT 2 US-09-673-395A-59 ; Sequence 59, Application US/09673395A	GENERAL INCORMATION:   APPLICANT: SPECHT, THOMAS   APPLICANT: SPECHT, THOMAS   APPLICANT: SPECHT, THOMAS	diving bindami wood brokeniood	; TITLE OF INVANTION: HUMAN NUCLEIC ACID SEQUENCES FROM UIERUS IUMOR 11550E; FILE REFERENCE: ALBRE-12; CURRENT APPLICATION NUMBER: US/09/673,395A; CURRENT FILING DATE: 2000-10-17;	) NUMBER OF SEQ ID NOS: 03/ ) SEQ ID NO 59 IENGTH: 1630		Query Match 64.8%; Score 1092.2; DB 4; Length 1630; Best Local Similarity 99.7%; Pred. No. 5.5e-247; Matches 1094; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Best Local Similarity 94.6%; Pred. No. 0;  Matches 1604; Conservative 0; Mismatches 57; Indels 34; Gaps 11;  Qy 1 GCGGACACAGCGCAGAGCGAGCGAGCGACAGACAAGACAGACACACAGAGGGCAGAGGCAAGAGGCAAGAGGGCAAGAGGGCAAGAGGCAAGAGGCAAGAGGCAAGAGGCAAGAGGCAAGAGAGGCAAGAGAGGCAAGAGAAAAGGCAAGAGAGAGGCAAGAGAAAAAGAGGAAAAAGAGAAAAAA		180 CACGCGCCCCTCCGGTCAGCATGAGGTCCTGGCGGCGCCGCTGCCTGC	QY 240 IGGCGCTGTACACCGCGCGTGTGGACGGGTCCAAATGCAAGTGCTCCCGGAAGGGACCCA 299 Db 411 NNNNNNTACACCGCGCGTGTGGACGGGTCCAAATGCAAGTGCTCCCGGAAGGACCCA 470	Qy 300 AGATCCGCTACAGCGACGTGAAGAGCTGGAAATGAAGCCAAAGTACCGCACTGCGAGG 359	QY 360 AGAAGATGGTTATCATCACCACCAAGAGCGTGTCCAGGAGGTCAGGAGCACTGCC 419	Qy 420 TGCACCCCAAGCTGCAAAGCACCAAGGGCTTCATCAAGTGGTACAAGGCCTGGAACGAGA 479	Qy         480 AGCGCAGGGTCTACGAAGAATAGGGTGAAAACCTCAGAAGGGAAAACTCCAAAACCTCAGAAACTCCAGAACCAGTT 539           Db         651 AGCGCAGGGTCTAACGAAAAACCTCAGAAAACTCCAGAAACTCCAAACCAAACCCAAACTT 710	540 GGGAGACTTGTGCAAAGGACTTTGCAGATTAAAAAAAAAA		OY 660 AAGCACTTTTTA-CCAACGGTCAGTTTTTACATTTTATAGCTGCGTGCGAAGGCTTCCA 718	OY 719 GAIGGABACCCAICTCTTGTGCTCCAGACTTCATCACAGGCTGCTTTTTATCAAAAA 778 DD 870 GAIGGGAGACCCAICTCTTGTGCTCCAGACTTCATCAGGCTGCTTTTTATCAAAAA 929	OY 779 GGGBAAACTCAIGCCITICCITITI-AAAAAHGCTTITIGAATTTGICCAIACGTCA 837 	OY 838 CTATACATCTGAĞCTTTATAAGGGCCGGGAGGAACAATGAGCTTGGTGGACACATTTCA 897 	OY 898 TIGCAGIGITGCTCCAITCCTAGCTIGGGAAGC-TICCGCTIAGAGGICCTGGGCCTCG 956	Qy         957 GCACAGGGCTCTCCTGGGCTTATGGCCGGTCACAGCCTCAGTGTGACTCCAC 1016           Db         1110 GCACAGGGCTCTCCTGGGCTTATGGCCGGTCACAGCTCAGTGTCACTCCAC 1169	Oy 1017 AGTGGCCCTGTAGCCGGGAAGCAGAGCAGGTCTCTCTGCATCTGTTCTCTGAGGAAC 1076

Oy 1655 AATATATTTGAAATGTA 1671 	RESULT 3 US-09-673-395A-541 ; Sequence 541, Application US/09673395; ; Parent No. 6620923; ; GENERAL INFORMATION: ; APPLICANT: SPECHT, THOMAS ; APPLICANT: HINZMANN, BERND	, APPLICANT: SCHWITT, ARMIN , APPLICANT: PILARSKY, CHRISTIAN , APPLICANT: DAHL, EDGAR , APPLICANT: ROSENTHAL, ANDRE	) TILE OF THE NEW TICH. HUMBER NUCLEIC AC FILE REFERENCE: ALBRE-12 CURRENT APPLICATION NUMBER: US/09/67 CURRENT FILING DATE: 2000-10-17	SOFTWARE: Patentin Ver. 2.1 ; SEQ ID NO 541 ; SEQ ID NO 541 in Insurgh: 1962 mvbr. nan		Query Match 57.9%; Score Best Local Similarity 99.7%; Pred. Matches 978; Conservative 0; Mi		635 939	6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	1059		875	Oy 935 GCTTAGAGGTCCTGGCGCTCGGCACD	Qy 995 CACAGCCTCAGTGACTCCACAGT	Qy 1055 CTGCATCTGTTCTCTGAGGAACTCA	Qy 1115 CTGGTTAATTTTTACACACCCTAGG
575 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	635 AAGACACAATTATATATTATGAAGCACTTTTTACCAACGGTCAGTTTTACATTTT 694  [	755 TCACAGGCTGCTTTTTATCAAAAGGGGAAAACTCATGCCTTTCCTTTTTAAAAAATGCT 814 	815 ITTITGIATITGICCATACGICACTATACATCTGAGCTITATAAGGGCCCGGGAGGAACA 874 	875 ATGAGCTTGGTGGACACATTTCATTGCAGTGTTGCTCCATTCCTAGCTTGGGAAGCTTCC 934	935 GCTTAGAGGTCCTGGCGCCACAGCTGCCACGGGCTCTCCTGGGCTTATGGCCGGT 994	995 CACAGCCTCAGTGTGACTCCACAGTGGCCCCTGTAGCCGGGCAAGCAGGAGCAGGTCTCT 1054	1055 CIGCATCTGTTCTCTGAGGAACTCAAGTTTGGTTGCCAGAAAATGTGCTTCATTCCCC 1114	1115 CTGGTTAATTTTTACACCCTAGGAAACATTTCCAAGATCCTGTGATGGCGAGACAAAT 1174 	1175 GATCCTTAAAGAAGGTGTGGGGTCTTTCCCAACCTGAGGATTTCTGAAAGGTTCACAGGT 1234	1235 TCAATATTTAATGCTTCAGAAGCATGTGAGGTTCCCAACACTGTCAGGAAAAACCTTAGG 1294 	1295 AGAAAACTTAAAAATATATGAATACATGCGCAATACACAGCTACAGCTACAGACACACATTCTGTT 1354 	1355 GACAAGGAAAACCTTCAAAGCATGTTTCTTTCCCTCACCACAGAACATGCAGCTACT 1414 	1415 AAAGCAATATATTTTGTGATTCCCCATGTAATTCTTCAATGTTAAACAGTGCAGTCCTCTT 1474 			GTCAGAAACCATTAGCATTGCAGGTTTCATATTCTTTCTT
<i>ት</i>	\text{7} \text{8} \text{8} \text{7} \text{8} \text{7} \text{8} \text{7} \text{8} \text{7} \text{8} \text{7} \text{8} \text{7} \text{8} \te	사 전 전	<i>장</i>	6 G	& 8	8 S	8 8	& <del>8</del>	\$ g	8 8	\$ B	8 %	8 8	8 8	કે દ	8 8 8

```
TTATCAAAAAGGGGAAACTCATGCTTTCTTTTAAAAATGCT 814
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAGGCTTCCAGATGGGAGACCCATCTCTTGTGTGCTCCAGACTTCA 1058
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CACATITCATIGCAGIGGICCATICCTAGCITGGGAAGCTICC 934
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGCCTCGGCACAGCCACGGGCTCTCCTGGGCTTATGGCCGGT 994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGAGGAACTCAAGTTTGGTTGCCAQAAAATGTGCTTCCCCC 1114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CACACCCTAGGAAACATTTCCAAGATCCTGTGATGGGGGAGACAAAT 1174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTGTGGGGTCTTTCCCAACCTGAGGATTTCTGAAAGGTTCACAGGT 1234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GACTCCACAGTGGCCCCTGTAGCCGGCCAAGCAGGAGCAGGTCTCT 1054
                                                                                                                                                                                                                                                                                                                                                                                                          ATATTGTTATGAAGGACTTTTACCAACGGTCAGTTTTACATTTT 694
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAAGGCTTCCAGATGGGAGACCCATCTCTGTGTGCTCCAGACTTCA 754
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CATACGICACIATACATCIGAGCITTATAAGCGCCCGGGAGGAACA 874
                                                                                                                                                                                                                                                                                                                                                                     NDRE
N NUCLEIC ACID SEQUENCES FROM UTERUS TUMOR IISSUE
                                                                                                                                                                                                                                                                                                                                                      .9%; Score 976.2; DB 4; Length 1962; 0.7%; Pred. No. 1.1e-219; e 0; Mismatches 3; Indels 0;
                                                                                                                                          ER: US/09/673,395A
US/09673395A
                                                                                 RISTIAN
                                        S KND
```

g 8 S

à

q

 $\dot{\delta}$ 

à 음 à 9

ò

```
1201
                                                                                                                                                                                                                                                                                                                                1262 GAGGTTCCCAACACTGTCAGCAAAACCTTAGGAGAAAACTTAAAAATATATGAATACAT 1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1501
                                                                                                                                                                                                                                       1202 CCCAACCTGAGGATTTCTGAAAGGTTCACAGGTTCAATATTTAATGCTTCAGAAGCATGT 1261
                                                                                                                                                                                                                                                                                                                                                                                                                          1322 GCGCAATACACAGCTACACACACATTCTGTTGACAAGGGAAAACCTTCAAAGCATGTT 1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1382 TCTTTCCCTCACCACACAGAACATGCAGTACTAAAGCAATATATTTGTGATTCCCCCATG 1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1082 TTTGGTTGCCAGAAAAATGTGCTTCATTCCCCCTGGTTAATTTTTACACACCCTAGGAA 1141
                                                                                                                                                                                                                                                                                     445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1502 TTCCTCTGTACATATACCCTTAAGAACGCCCCCTCCACACACTGCCCCCCAGTATATGCC 1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       384 GCGCAATACACAGCTACAGACACATTCTGTTGACAAGGGAAAACCTTCAAAGCATGTT 325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    264 TAATICTICAAIGITAAACAGIGCAGICCTCTITICGAAAGCTAAGAIGACCATGCGCCCT 205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             145
       684 CCCCTGTAGCCGGGCAAGCAGGAGCAGGTCTCTCTGCATCTGTTCTCTGAGGAACTCAAG 625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    624 TITIGGTIGCCAGAAAATGTGCTTCATTCCCCCCTGGTTAATTTTTACACACCCTAGGAA
                                                                                                                                                 1142 ACATTTCCAAGATCCTGTGATGGCGAGACAAATGATCCTTAAAGAAGGTGTGGGGGTCTTT
                                                                                                                                                                               564 ACATTTCCAAGATCCTGTGATGGCGAGACAAATGATCCTTAAAGAAGGTGTGGGGTTTTT
                                                                                                                                                                                                                                                                   504 CCCAACCTGAGGATTTCTGAAAGGTTCACAGGTTCAATATTTAATGCTTCAGAAGGATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1442 TAATITCTICAATGITAAACAGTGCAGTCCTCTTTCGAAAGCTAAGAIGACCATGCGCCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 727.2; DB 4; Length 1663; Pred. No. 2.9e-161;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 370, Application US/09312283C
; Sequence 370, Application US/09312283C
; Patent No. 657309S
; GENERAL INFORMATION:
; APPLICANT: Watson, James D.
; APPLICANT: Strachan, Lorna
APPLICANT: Sleeman, Matthew
; APPLICANT: Murisch, Rene
; APPLICANT: Mumble, Krishanand D.
; TITLE OF INVENTION: Compositions Isolated from Skin Cells
; TITLE OF INVENTION: and Methods for Their Use
; TITLE OF INVENTION: and Methods for Their Use
; TITLE OF INVENTION: 1000-10102
; TITLE OF SEQ ID NOS: 425
; CURRENT APLICATION NUMBER: US/09/312,283C
; CURRENT FILING DATE: 1999-05-14
; SEQ ID NOS: 425
; SOFTWARE: FastSEQ for Windows Version 4.0
; LENGTH: 1663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           43.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1682 AAA 1684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   24 AGA 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA
CRGANISM: Mouse
US-09-312-283C-370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 5
US-09-312-283C-370
                                                                                      셤
                                                                                                                                                                                  g
                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                             qq
                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                            \delta
                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-673-395A-541/c

Sequence 541, Application US/09673395A

Patent No. 6620923

GENERAL INFORMATION:
APPLICANT: SPECHT, THOMAS

APPLICANT: SCHMITT, ARMIN
APPLICANT: PILARSKY, CHRISTIAN
APPLICANT: ROSENTHAL, ANDRE
TILE REPREMENCE: ALBRE-12
CURRENT APPLICATION NUMBER: US/09/673,395A
CURRENT APPLICATION NUMBER: 2000-10-17
NUMBER OF SEQ 1D NOS: 637

SOFTWARR: PATENTIN Ver. 2.1
                                                                                                                       1598
                                                                                                                                                                                                                                                                                                            1718
                                                                                                                                                                                                                                                                                                                                                          1474
1719 AAAGCAATATATTTGTGATTCCCCATGTAATTCTTCAATGTTAAAACAGTGCAGTCCTCTT 1778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1779 TCGAAAGCTAAGATGACCATGCGCCCTTTCCTCTGTACATATACCCTTAAGAACGCCCCC 1838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  962 GCTGCCACGGGCTCTCCTGGGCTTATGGCCGGTCACACACCTCAGTGTGACTCCACAGTGG 1021
                                                                                                                                                                        1354
                                                                                                                                                                                                                                                                 GACAAGGGAAAACCTTCAAAGCATGTTTCTTTTCCCTCACCACAACAGAACATGCAGTACT 1414
                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCGAAAGCTAAGATGACCATGCGCCCTTTCCTCTGTACATATACCCTTAAGAACGCCCCC 1534
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1235 TCAATATTTAATGCTTCAGAAGCATGTGAGGTTCCCAACACTGTCAGCAAAAACCTTAGG 1294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 782 GAAAACTCATGCCTTTCCTTTTTAAAAATGCTTTTTTTGTATTTGCATGGTCACTAT 941
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             864 ACATCTGAGCTTTATAAGCGCCCGGGAGGAACAATGAGCTTGGTGGACACATTTCATTGC 805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      902 AGIGITGCTCCATTCCTAGCTTGGGAAGCTTCCGCTTAGAGGTCCTGGCGCCTCGGCACA 961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     804 AGTGTTGCTCCATTCCTAGCTTGGGAAGCTTCCGCTTAGAGGTCCTGGCGCCTCGGCACA 745
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                744 GCTGCCACGGGCTCTCCTGGGCTTATGGCCGGTCACAGCCTCAGTGTGACTCCACAGTGG 685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             842 ACATCTGAGCTTTATAAGCGCCCGGGAGGAACAATGAGCTTGGTGGACATTTCATTGC 901
                                                                                                          1539 TCAATATTTAATGCTTCAGAAGCATGTGAGGTTCCCAACACAGTCAGCAAAAACCTTAGG
                                                                                                                                                                                                                                                                                        1659 GACAAGGAAAACCTTCAAAGCATGTTTCTTTCCCTCACCACAACAGAACATGCAGTACT
                                                                                                                                                                                                                                                                                                                                                          AAAGCAATATATTTGTGATTCCCCATGTAATTCTTCAATGTTAAACAGTGCAGTCCTCTT
                                                                                                                                                                     AGAAAACTIAAAAATATATGAATACATGCGCAATACACACAGCTACAGACACACATTCTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ;0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 51.8%; Score 872.6; DB 4; Length 1962; 97.9%; Pred. No. 2.3e-195; Live 0; Mismatches 19; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1535 TCCACACACTGCCCCCCAGTA 1555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1839 recacacacrecececagna 1859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 97.9°
Matches 884; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; ORGANISM: HOMO
US-09-673-395A-541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQ ID NO 541
LENGTH: 1962
                         1479
                                                                                                                                                                   1295
                                                                                                                                                                                                                                                              1355
                                                                                                                                                                                                                                                                                                                                                                                                                                                   1475
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1022
                                                                                                                                                                                                                                                                                                                                                          1415
```

g

ò ద ò g

ð 셤 ò

Mon Apr

1585 16; 1256 1219 1279 1339 1420 1390 1480 1534 1495 1554 1197 1159 1307 1364 1643 1614 ABARGAGCTTCATCCCACCC------ACCCCACCC 1099 1137 GGGCCTT----TCCTGTACATATACCTTAAGAAGGCCCCG-||||||||| GGGCCCTGCCTCTCTGTGTACATATTGCCTTCAGTACCCTCCC GCATGITICTITCCTCACCACAACAGAACATGCAGTACTAAAGCA
CTITGITICTITCCTCACCCCAACAAAAGTGCACT----occandrantrerreaardraaacagacagreerrrrregaaa ACACTGCCCCCCAGTATATGCCGCATTGTACTGCTGTTATATGC GAAAAATGTGCTTCATTCCCCCTGGTTAATTTTACACACCCTA Gaps Indels 129; Length 1663; imes G. ishannd D. mpositions Isolated from Skin Cells and Methods for Their Use 1011c2 1011c2 1999-05-14 3.2%; Score 727.2; DB 4; 1.5%; Pred. No. 2.9e-161; ve 0; Mismatches 363; dows Version 4.0 US/09312283C hew bew

Won Apr 26 15:48:51 20

11 13 71	GCGCAGAGCGCACGCCACGACAGCCCTGGGCATCCACGACGGCGCAGCCGGA 70	
1 (1)	0 00	
131	TCCGGGCCGCCCGCTCCGACGGCCAGGCCCTCCCCATGTCCCTGCTCCCAGGCCGCGCC 190	
191	CCTCCGGTCAGCATGAGGGTCCTGGCGGCGCGCTGCTGCTGCTGCTGGCGGCTGTAC 250	
251	ACCGCGCGTGTGGACGGGTCCAAATGCAAGTGCTCCCGGAAGGGACCCAAGATCGCTAC 310 	
311	AGCGACGTGAAGAGCTGGAAATGAAGCCAAAGTACCCGGACTGCGAGGAGAAGATGGTT 370 	
371		
431	CTGCAGAGCACCAAGCGCTTCAACTGGTACAACGCCTGGAACGAGAAGCGCAGGGTC 4	
491	Tacgaagaatagggtgaaaaacctcagaagggaaactccaaaccagttgggagacttgt 550 	
551	gcaaagactttgcagattaaaaaaaaaaaaaaaaaaaaa	
611	AAAGCCTTTCTTTCTCACAGGCATAAGACACAAATTATATATTGTTATGAAGCACTTTTT 67 	
671	ACCAACGGTCAGTITITACAIITITATAGCTGCGACGAAGGCTTCCAGAIGGGAGACCC 730 	
731	ATCTCTTGTGCTCCAGACTTCATCAGAGGTGCTTTTTATCAAAA 777 	
778	78 AGGGGAAAACICCATGCCTTTCCTTTTTAAAAATGCTTTTTTGTATTTGTCCATACGTCA 837 	
838	CTATACATCTGAGCTTTATAAGCGCCCGGGAGGAACAATGAGCTTGGTGGACACATTTCA 897 	
898	TTGCA CAGCA	
958 934		
1018	67660 	

CCTA 1137     ACCC 1099	GGGT 1197   TCTT 1159	CAGAAG 1256 	AAAA 1307    GAAG 1279	A 1364   AGCT 1339	AGCA 1420	GAAA 1480       GAT 1435	15	158	CTGC 1554	TG 1643    TGAA 1614					CGGA 70
GGTTAATTTTTACACACCC	agaaggtgtggggt 	TAATGCTTCA        AGATGCTTCT	-aaccitaggagaaaacttaa                     gatgitcgggaggacaaggga	cattctgttgacaagggaa                      catcctttggcaatggga	gaacatgcagtactaaagca 	Grecrerre    	TAAGAACGCC	GCTGTGTTAT	GCTGTG-TATCTG	CTTTCTAAGATG                CTTTCTAAGATGAA	1685	1660	764;	s 39; G	ACGGCGCAGC
ccrecrraar   	aaatgatcettaa              aagtgatcettaa	CIT-TCCCAACCDGAGGATTTCTGAAAGGTTCACAGGTTCAATATTTAATGCTTCAGAAG 	1 0	ઇ≕ઇ	5=5	ATATATTIGIGATICCCCAIGTAATTCTICAATGTTAAACAGIGCAGICCTCTTTCGAAA 	GCTAAGATGACCATGCGCCCTTTCCTCTGTACATATACCTTAAGAACGCCCCC-	TCACACACCCCCCCCCCCCCAGTATATGCCCCCATTGTACTGCTGTTTATATGCCCCCCCC	CCACCCCATGCCACACTGCCCCTCATTAGAGGCCGCACTGTATGGTGTGTG	TATGTACATGTCAGAAACCATTAGCATTGCATGCAGGTTTCATATTCTTTCT	GAAAGTAATAAATATTTGAAATGTAAAAAAAAAAAAAAA	AAAAAAAAA	skin Cells	15; Indel	GCGCAGAGCGCAGCGCCACACAGACAGCCCTGGGGCATCCACCGACGGCGCAGCCGGA
CAAGITIGGIIGCAGAAAAIGIGCIICAIICAITCCCCCTT 	GGGAGACAAA            BACCAGGCAAG	AGGTTCACAG        AGGTCGGCTG	aaa     aaatgattct	CAGCTACAGACA             CAGCCAGAGCTA	TCCTCACCACAA                 TCCTCACCCCAA	CTTCAATGTT   SAATACGCAAA	TCCTCTGTA	AGTATATGCC	ATTAGAGGCC	ATTGCATGCAG           sctGCATGCAG	AAATGTAAAA		ated From heir Use ,930A 3.0	No. 7.6e-9 smatches 1	SACAGCCCTGC
AAAATGTGC 	CCTGTGATGGC         CCTGTCACGAC	GATTTCTGAZ             GTTTCTGAZ	ACTGTCAGC         AGTGTGAGP	CAATACACA               GGACACACA	rgrrrcrr 	CATGIAATI    -  -  -			crececere	CCATTAGCZ         CCCTGAGTC	TATATTE		188930 INS ISO 909/18 Versio	pred.	CGGCCACA
TTGCCAGA             TTACCAGA	TCCAAGATO    CTCATTCCO	accrgaggi             Aacrgagg	TTCCCAAC         TCCCCAGC	TATATGAATACATGCGCAATACA 	-aaccttcaaagcat       ccccccaaagcttt	TGATTCCC    	ACCATGCGG	TCCACACAC	GCCACACAC	GTCAGAAA(             	TAATAAA		6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ty 79.7% ervative	GCAGCGCA
CAAGTITGG	ggaaacatticcagatcctgtgatggggggggc 	CTT-TCCCAACCTG 	catgigaggitoccaacactgigaggaa   -	atatatgaa     -  -  -	cccccccc	ATATATTIG	GCTAAGATGACCATGCGCCCTT		CCACCCCAT	TATGTACAT          TATGTAAAT	GAAAG	aagagaaagtaataa	Applica 150502 MATION: MATION: MATION: SIEGENAL, DINUEC, R MUTION: VENTION: VENTION: CETTION: CETTION: NCE: 1100 MATION: MATIO	Similarity 6; Conser	GCGCAGAGC
1078	1138	1198	1257	1308	1365	1421	1481	1535	1496	1586	1644	1615	1 7 188-93 uence 2 ent No. ERAL IN ERAL IN PLICANT ILE OF IL	Local es 60	11
yo, qq	QY Dp	y d	çy qa	\ 6	çy G	کې در د	ે દે	3 &	q	Qy	λõ	QQ	RESOULT PROPERTY APPROPERTY NUMBER OF SERVING COURTS SERVING COURT	Bes	à

```
190
                                               GCCAGCAGAGCCGGAAGGCGCGCCCCGGGCAGAGAAAGCCGAGCAGAGCTGGGTGGCGTC 130
                                                                            72 dcGAGCCGAGCAGAGAGAGAGGCGTGCTTGAAACCGAGAACCAAGCCGGGCGGCATC 131
                                                                                                                                             132 cóccógócógócógóadoságócógócócócótócorocorociócico-caccocócoco 190
                                                                                                                                                                                  250
                                                                                                                                                                                                                 250
                                                                                                                                                                                                                                           251 ACCGCGCGTGTGGACGGGTCCAAATGCAAGTGCTCCCGGAAGGGAACCCAAGATCCGCTAC 310
                                                                                                                                                                                                                                                                         251 GCCTCGCGCGTGGACGCGTCCAAGTGTATCCCCGGAAGGGCCCCAAGATCCGCTAC 310
                                                                                                                                                                                                                                                                                                                                             370
                                                                                                                                                                                                                                                                                                                                                                            430
                                                                                                                                                                                                                                                                                                                                                                                                            430
                                                                                                                                                                                                                                                                                                                                                                                                                                           490
                                                                                                                                                                                                                                                                                                                                                                                                                                                             431 CTGCAGAGCACCAAACGCTTCATCAAGTGGTACAATGCCTGGAACGAAAGGCGCAGGGTC 490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         610
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        670
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        491 TACGAAGAATAGGGTGAAAAACCTCAGAAAGGGAAAACTCCAAAACCAGTTGGGAGACTTGT 550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       551 GCAGAGGACTTTGCAGATT---------------AAAATAA 576
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        577 AAGCCCTTTCTTCTCACAAGCATAAG--ACAAATTATATATATTGCTATGAAGCTCTTCTT 634
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   671 ACCAACGGTCAGTTTTTACATTTTATAGCTGCGTGCGAAAGGCTTCCAGATGGGAGACCC 730
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   635 ACC-AGGGICAGITITITACATITITATAGCIGIGIGAAAGGCITICCAGAIGIGAGAICC 693
CCTCCGGTCAGCATGAGGCTCCTGGCGGCCGCGCTGCTGCTGCTGCTGCTGGCGCTGTAC
                                                                                                                                                                                                                                                                                                                                   131 TCCGGGCGCCGCTCCGACGGCCAGCGCCTCCCCATGTCCCTGCTCCCACGCCGCGCC
                                                                                                                                                                                                   191 CCTCCGGCCAGCATGAGCCTCCTGGCGGCGCGCTCCTGCTGCTGCTCTGGCGCCTGTGTGC
                                                                                                                                                                                                                                                                                                          311 AGCGACGTGAAGAAGCTGGAAATGAAGCCAAAGTACCCGCACTGCGAGGAGAAGATGGTT
                                                                                                                                                                                                                                                                                                                                                                         491 TACGAAGAATAGGGTGGACGATCATGGAAAGAAAAAACTCCAGGCCAGTTGAGAGACTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       611 AAAGCCTTTCTTCTCACAGGCATAAGACACAAATTATATATTGTTATGAAGCACTTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                          CTGCAGAGCACCAAGCGCTTCATCAAGTGGTACAACGCCTGGAACGAAGCGCAGGGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    731 ATCTCTCTTGTGCTCCAGACTTCATCACAGGCTGCTTTTT 770
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     694 AGCTCGCCTGCGCACCAGACTTCATTACAAGTGGCTTTTT 733
                                                                                                                                                                                                                                                                                                                                                                         371
                                                                                                                                                                            191
                                               7.1
                                                                                                                                                                                                                                                                                                                                                                                                                                          431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         551
                                                                         g
                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                a
                                        à
                                                                                                            ò
                                                                                                                                  g
                                                                                                                                                                           \delta
                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                       \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                      \dot{\delta}
                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ద
```

```
RESULT 8
US-005-724-864-66
19-005-724-864-66
19-005-724-864-66
19-005-724-864-66
19-005-724-864-66
19-005-724-864-66
19-005-724-864-66
19-005-724-864-66
19-005-724-864-66
19-005-724-864-66
19-005-724-864-66
19-005-724-864-66
19-005-724-864-66
19-005-724-864-66
19-005-724-864-66
19-005-724-864-66
19-005-724-864-66
19-005-724-864-66
19-005-724-864-66
19-005-724-864-66
19-005-724-864-66
19-005-724-864-66
19-005-724-864-66
19-005-724-864-66
```

```
s,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             250
                                                                                                                                                                                                                                                                                                                                                                              71 GCCAGCAGAGCCGGAAAGGCGCGCCCCGGGCAGAAAAGCCGAGCAGAGCTGGGTCGCGTC 130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        311 AGCGACGTGAAGAAGCAGAAATGAAGCCAAAAGTACCCACACTGCGAGGAGAAGAAGATGGTT 370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          371 ATCGTCACCACGAGAGCATGTCCAGGTACCGGGGCCCAGGAGCACTGCCTCCACCCTAAG 430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            491 TACGAAGAATAGGGTGAAAAACCTCAGAAGGGAAAACTCCAAAACCAGTTGGGAGACTTGT 550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             491 TACGAAGAATAGGGTGGACGATCATGGAAAAAAAACTCCAGGCCAGTTGAGAGACTTCA 550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               251 ACCGCGCGTGTGGACGGGTCCAAATGCAAGTGCTCCCGGAAGGGACCCAAGGTCCGCTAC 310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      311 AGCGACGTGAAGAAGCTGGAAATGAAGCCAAAGTACCCGCACTGCGAGGAGAAGATGGTT 370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTGCAGAGCGCACCAAGCGCTTCATCAAGTGGTACAACGCCTGGAACGAGAAGCGCAGGGTC 490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                431 CTGCAGAGCACCAAACGCTTCATCAAGTGGTACAATGCCTGGAACGAGAAGCGCAGGGTC 490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   251 GCCTCGCGCGTGGACGGGTCCAAGTGTAAGTGTTCCCGGAAGGGGCCCCAAGATCCGCTAC 310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  551 GCAGAGGACTTTGCAGATT----AAAATAA 576
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            577 AAGCCCTTTCTTTCTCACAAGCATAAG--ACAAATTATATATTGCTATGAAGCTCTTCTT 634
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            671 ACCAACGGTCAGTTTTTACATTTTATAGCTGCGAAAAGGCTTCCAGATGGGAGACCC 730
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   635 ACC-AGGGTCAGTTTTTAGATTTTATAGCTGTGTGTGAAAGGCTTCCAGATGTGAGATCC 693
                                                                                                                                                                                            70
                                                                                                                                                                                                                                                                                  71
                                                                                                                                                                                                                                                                                  13 GCCAAGCGCACCACGCACCGCGACAGAC-GCCAGGAGCACCCATCGACGGGCGTACTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     72 degaleccialecada de de deserciones de la companione de la constante delicitation de la constante della cons
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     131 TOCGGGCCGCTCCGACGGCCAGCGCCTCCCATGTCCCTGCTCCCACGCCGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 132 CCCCGGCCGCCGCACGCACAGCCGGCGCCCTCCTTGCCTCCCTGCTGCC-CACCGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       191 CCTCCGGTCAGCATGAGGCTCCTGGCGGCCGCGCTGCTCCTGCTGCTGCTGGCGCTGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               191 CCTCCGGCCAGCA1GAGGCTCCTGGCGGCCGCGCTCCTGCTCCTGCTCCTGGCGCTGTGC
                                                                                                                                                                                            GCGCAGAGCGCAGCGCACGGCCACAGACAGCCCTGGGCCATCCACCGACGGCGCAGCGGGA
Query Match 26.6%; Score 448; DB 4; Length 764;
Best Local Similarity 79.7%; Pred. No. 7.6e-96;
Matches 606; Conservative 0; Mismatches 115; Indels 39; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Waterson, James D.
APPLICANT: Strachan, Lorna
APPLICANT: Strachan, Lorna
APPLICANT: Strachan, Matthew
APPLICANT: Onrust, Rene
APPLICANT: Murison, James G.
APPLICANT: Krishanand D.
TITLE OF INVENTION: Compositions Isolated from Skin Cells
FILE APPLICANT: and Methods for Their Use
FILE REFERENCE: 11000.1011c2
CURRENT APPLICATION NUMBER: US/09/312,283C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    731 ATCTCTTGTGCTCCAGACTTCATCACAGGCTGCTTTT 770
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               694 AGCTCGCCTGCGCACCACACTTCATTACAAGTGGCTTTTT 733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 263, Application US/09312283C Patent No. 6573095 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 9
US-09-312-283C-263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          431
                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                              ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ਨੇ
```

```
71 GCCAGCAGAGCCGGAAGGCGCGCCCCGGGCAGAAAGCCGAGCAGAGCTGGGTGGCGTC 130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          131 TCCGGGCCGCCGCTCCGACGGGCCAGCGCCTCCCCATGTCCCTGCTCCCACGCCGCGCC 190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          concegencadoa para de de consecuencia de conse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         251 GCCTCGCGCGTGGACGGCTCTAAGTGTTCCCGGAAGGGGCCCAAGATCCGCTAC 310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTGCAGAGCACCAAGCGCTTCATCAAGTGGTACAACGCCTGGAACGAGAAGCGCAGGGTC 490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   degrácicaráca de a deserción de a contrata de actual de a contrata de actual de actu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            251 ACCGCGCGTGTGGACGCGTCCAAATGCAAGTGCTCCCGGAAGGGACCCAAGATCCGCTAC 310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGCGACGTGAAGAAGCTGGAAATGAAGCCAAAGTACCCGCACTGCGAGGAGAAGATGGTT 370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        491 TACGAAGAATAGGGTGGACGATCATGGAAAGAAAAACTCCAGGCCAGTTGAGAGACTTCA 550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  611 AAAGCCTTTCTTCTCACAGCCATAAGACACAAATTATATATTGTTATGAAGCACTTTTT 670
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 311 AGCGACGTGAAGAGCTGGAAATGAAGCCAAAGTACCCACACTGCGAGGAGAAGATGGTT 370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             431 CTGCAGAGCACCAAACGCTTCATCAAGTGGTACAATGCCTGGAACGAGAAGGCGCAGGGTC 490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TACGAAGAATAGGGTGAAAAACCTCAGAAGGGAAAACTCCAAACCAGTTGGGAGACTTGT 550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     671 ACCAACGGTCAGTTTTTACATTTTATAGCTGCGTGCGAAAGGCTTCCAGATGGGAGACCC 730
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              635 ACC-AGGGTCAGTTTTTACATTTTATAGCTGTGTGTGAAAGGCTTCCAGATGTGAGATCC 693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              11 GCGCAGAGCGCAGGCCACAGACAGCCCTGGGCATCCACCGACGGCGCAGCCGGA 70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13 GCCAAGCGCACCAGGACCGCGACAGAC-GGCAGGAGCACCCATCGACGGCGTACTGGA 71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             26.6%; Score 448; DB 4; Length 764;
79.7%; Pred. No. 7.6e-96;
tive 0; Mismatches 115; Indels 39;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            731 ATCTCTTGTGCTCCAGACTTCACAGGCTGCTTTTT 770
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            694 Agchceccrececaccaeacricarracaacrecerrirr 733
CURRENT FILING DATE: 1999-05-14
NUMBER OF SEQ ID NOS: 425
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  al Similarity 79.73
606; Conservative
                                                                                                                                                                                                                                                                                                               TYPE: DNA
ORGANISM: Mouse
                                                                                                                                                                                                                                                                                                                                                                                               / OKGANISH NOTE NOTE 1
                                                                                                                                                                           SEQ ID NO 263
LENGTH: 764
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local S:
Matches 606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
```

TELEFAX: 202-371-2540
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 461 base pairs

nucleic acid EDNESS: double

TYPE: nucleic STRANDEDNESS: TOPOLOGY: both

both

MOLECULE TYPE: CDNA FEATURE:

NAME/KEY: CDS LOCATION: 43...

sig peptide 43..126

LOCATION:

FEATURE:

79..375

NAME/KEY: LOCATION: FEATURE: NAME/KEY: mat\_peptide 127..375 sig\_peptide 79..126

NAME/KEY: LOCATION: NAME/KEY: LOCATION:

ADDRESSEE: Sterne, Kessler, Goldstein & Fox, P.L.L.C. STREET: 1100 New York Ave., Suite 600

APPLICANT: Su, Jeffrey Y.
APPLICANT: Li, Haodong
TITLE OF INVENTION: Chemokine Alpha 2
NUMBER OF SEQUENCES: 10

CORRESPONDENCE ADDRESS:

Washington

USA

COUNTRY:

COMPUTER READABLE FORM:
MEDIUM TYPE: Flopewatible
COMPUTER: IBM PC compatible
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/825,556A
FILING DATE: 19-MAR-1997
CLASSIFICATION: 435
PRICK APPLICATION NUMBER: US 60/013,653
FILING DATE: 19-MAR-1996
ATVONEY/AGENT INFORMATION:
NAME: Steffe, Eric K
REGISTRATION NUMBER: 36,688
REFERRICE/OMMINICATION INFORMATION:
TELEFRAMICATION INFORMATION:
TELEFRAMICATION INFORMATION:
TELEFRAMICATION NUMBER: 36,688
REFERRICE/OMMINICATION INFORMATION:
TELEFRAMICATION INFORMATION:
TELEFRAMICATION OFFICE TO THE TELEFRAMICATION OFFI THE TO T

```
249
                                                                                                                                                                           130 CTCCGGGCCGCCGCTCCGACGGGCCAGCGCCCTCCCCATGTCCCTGCTCCCACGCCGCGC 189
                                                                                                                                                                                                                                                                                                                                                 66 ccrccdgrcadcardadgcrccrdgcgccgcrgcrccrgcrgcrgcrgcrgcrgcrgrafta 125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            245
                                                                                                                                                                                                                                                                                                                                                                                                             250 CACCGCGCGTGTGGACGGGTCCAAATGCAAGGCTCCCGGAAGGGACCCAAGATCCGCTA 309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                310 CAGCGACGTGAAGGTGGAAATGAAGCCAAAGTACCCGCACTGCGAGGAGAAGATGGT 369
                                                                                                                                                                                                                                                                                              126 caccecererereacegerecaarecaagecreeceaaageacecaagareeera
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      186 CAGCGACGTGAAGAAGCTGGAAATGAAGCCAAAGTACCCGCACTGCGAGGAGAAGATGGT
                                                                                                                                                                                                                                 6 crecedecedecederecedacedecedececerecedarerecerecedecede
                                                  Query Match 25.9%; Score 435.6; DB 2; Length 461;
Best Local Similarity 98.7%; Pred. No. 4.9e-93;
Matches 450; Conservative 0; Mismatches 4; Indels 2; Gaps
US-08-825-556A-1
                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                             ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
```

S-UG-22-3-35-G Sequence 1, Application US/08825556A Patent No. 5910431 GENERAL INFORMATION: APPLICANT: Ni, Jian APPLICANT: Gentz, Reiner L.

RESULT 10 US-08-825-556A-1

```
mat_peptide
                                                sig peptide
79..126
NAME/KEY:
LOCATION:
FEATURE:
                                              , NAME/KEY:
, LOCATION:
US-09-238-184-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFIWANE, SEQ ID NO 38
                                                                                                                                                                                                                                                                                                                                                                                                d
                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                     ծ
                                                                                                                                                                                                                                                                                                                                                                                                                                   슝
                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
 430 GCTGCAGAGCACCAAGCGCTTCATCAAGTGGTACAACGCCTGGAAACGAAAGCGCAGGGT 489
                                                                                  306 GCTGCAGAGAGCACCAAGCGCTTCATCAAGTGGTACAACGCCTGGAACGAAGAGAGGGTT 365
                                                                                                                             490 CTACGAAGAATAGGGTGAAAACCTCAGAAGGGAAAACTCCAAACCAGTTGGGAGACTTG 549
                                                                                                                                                366 CTACGAAGAATAGGGTGAAAAACCTCAGAAGGAAAACTCCAAACCAGTTGGGAGACTTG 425
                                                                                                                                                                                                                                         Sequence 1, Application US/09238184

Sequence 1, Application US/09238184

Patent No. 6479633

GENERAL INFORMATION:
APPLICANT: Ni, Jian
APPLICANT: Gener L.
APPLICANT: Li, Hacdong
TITLE OF INVENTION: Chemokine Alpha 2

NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
ADDRESSEE: Sterne, Kessler, Goldstein & Fox, P.L.L.C.
STREET: 1100 New York Ave., Suite 600
STATE: DC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/238,184
                                                                                                                                                                                           550 TG--CAAAGGACTTTGCAGATTAAAAAAAAAAAA 583
                                                                                                                                                                                                                    426 TGGCAAAGGAACTTTGCAGATTAAAAAAAAAAAA 461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER: US/08/825,556
FILING DATE: 19-MAR-1997
APPLICATION NUMBER: US 60/013,653
ATTORNEY/AGENT INFORMATION:
NAME: Steffe, Eric K.
REGISTRATION NUMBER: 36,688
REFERENCE/DOCKET NUMBER: 1488.0850001
TELEPHONE: 202-371-2600
TELEPHONE: 202-371-2600
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH: 461 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         sig_peptide
43..126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CDS
79..375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            43..375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MOLECULE TYPE: CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TOPOLOGY: both
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURE:
NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME/KEY:
LOCATION:
                        g
                                                             ð
                                                                                  d
                                                                                                                    8
                                                                                                                                                ద
                                                                                                                                                                                         ठे
```

```
130 CTCCGGGCCGCCGCTCCGACGGGCAGGCCCTCCCCATGTCCCTGCTCCCACGCCGCGC 189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     190 CCCTCCGGTCAGCATGAGGCTCCTGGCGGCCGCGCTGCTCCTGCTGCTGCTGCTGGCGCTGTA 249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            66 cccrecegreacardacecrecies de cereces en conservados de contractes de 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    250 CACCGCGCGTGTGGACGGGTCCAAATGCAAGTGCTCCCGGAAGGGACCCAAGATCCGCTA 309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   126 CACCGCGCGTGTGGACGGGTCCAAATGCAAGTGCTCCCGGGAAGGGACCCAAGATCCGCTA 185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          310 CAGCGACGTGAAGAAGCTGGAAATGAAGCCAAAGTACCCGCACTGCGAGGAGGAGATGGT 369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 430 GCTGCAGAGCACCAAGCGCTTCATCAAGTGGTACAACGCCTGGAACGAAGCGCAGGGT 489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               490 CTACGAAGAATAGGGTGAAAAACCTCAGAAGGGAAAACTCCAAACCAGTTGGGAGACTTG 549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              366 CTACGAAGAATAGGGTGAAAAACCTCAGAAGGGAAAACTCCCAAACCAGTTGGGAGACTTG 425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   11 GCGCAGAGCGCAGCGCCACAGACAGCCCTGGGCATCCACCGACGGCGCAGCCGGA 70
                                                                                                                                                                                                                                                                                                                                                                                              6 CTCCGGGCCGCCGCCTCCGACGGCCCAGCGCCCTCCCCATGTCCCTGCTCCCCACGCGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  186 CAGCGACGTGAAGAAGCTGGAAATGAAGCCAAAGTACCCGCACTGCGAGGAGAAGAAGATGGT
                                                                                                                                                       ;
;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    41;
Query Match 25.9%; Score 435.6; DB 4; Length 461; Best Local Similarity 98.7%; Pred. No. 4.9e-93; Matches 450; Conservative 0; Mismatches 4; Indels 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 12
US-09-188-930-38
; Sequence 38, Application US/09188930A
; Patent No. 615620.
; GENERAL INFORMATION:
; APPLICANT: Watson, James D.
; APPLICANT: Stream, Matthew
APPLICANT: Stream, Matthew
APPLICANT: Stream, Matthew
; APPLICANT: Onrust, Rene
; APPLICANT: Murison, James Greg
TITLE OF INVENTION: Compositions Isolated From Skin Cells
TITLE OF INVENTION: Compositions Isolated From Skin Cells
; FILE REPERENCE: 11000.1011c1
; CURRENT APPLICATION NUMBER: US/09/188,930A
; NUMBER OF SEQ. ID NOS: 348
; SOFTWARE: FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 25.3%; Score 426; DB 3; Length 766; Best Local Similarity 79.5%; Pred. No. 1.1e-90; Matches 606; Conservative 0; Mismatches 115; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             550 TG--CAAAGGACTTTGCAGATTAAAAAAAAAAAA 583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     426 rigicia a de la companida de la 461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA
CRGANISM: mouse
US-09-188-930-38
```

ORGANISM: Mouse US-09-312-283C-38

```
71 GCCAGCAGAGCCGGAAGGCGCGCCCCGGGCAGAGAAGCCGAAGCAGAGCTGGGTGGCGTC 130
                                                                                                                                                                         251 GCCTCGCGCGTGGACGGGTCCAAGTGTAAGTGTTCCCGGAAGGGGCCCAAGATCCGCTAC 310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       131 TCCGGGCCGCCGCTCCGACGGGCCAGCGCCCTCCCCATGTCCCTGCTCCCACGCCGCGCC 190
                                                                                                                                                                                                                               CCTCCGGTCAGCATGAGGCTCCTGGCGGCCGCTGCTGCTGCTGCTGCGCGCTGTAC 250
                                                                                                                                                                                                                                                                     191 cerecescescarandacreeraseseseseseseserecreeracreereseseseseses
                                                                                                                                                                                                                                                                                                              251 ACCGCGCGTGTGGACGGGTCCAAATGCAAGTGCTCCCGGAAGGGACCCAAGATCCGCTAC 310
                                                                                                                                                                                                                                                                                                                                                                                            311 AGCGACGTGAAGAAGCTGGAAATGAAGCCAAAGTACCCGGACTGCGAGGAGAAGATGGTT 370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         491 TCTACGAAGAATAGGGTGGACGATCATGGAAGAAAAAACTCCAGGCCAGTTGAGAGACTT 550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           311 AGCGACGTGAAGAGCTGGAAATGAAGCCAAAGTACCCACACTGCGAGGAGAAGATGGTT 370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           371 ATCATCACCACC-AAGAGCGTGTCC-AGGTACCGAGGTCAGGAGCACTGCCTGCACCCCA 428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            429 AGCTGCAGAGCACCAAGCGCTTCATCAAGTGGTACAACGCCTGGAACGAGAAGGCGCAGGG 488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           489 TCTACGAAGAATAGGGTGAAAACCTCAGAAGGGAAAACTCCAAAACTGGGAGACTTGGGAGACTT 548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               551 CAĞCÂGÂGÂÇITIĞCAĞATI----AAAAT 576
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              609 AAAAAGCCTTTCTTCTCACAGGCATAAGACACAAATTATATATTGTTATGAAGCACTTT 668
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               669 TTACCAACGGTCAGTTTTTACATTTTATAGCTGCGAAAGGCTTCCAGATGGGAGAC 728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              635 TTACC-AGGGTCAGTTTTTATAGCTGTGTGTGAAAGGCTTCCAGATGTGAAGA 693
GCCAAGGGACCAGGACAGACAGACAGACAGCACCCATCGACGACGTACTGGA 71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Strachan, Lorna
APPLICANT: Strachan, Lorna
APPLICANT: Sleeman, Matthew
APPLICANT: Sleeman, Matthew
APPLICANT: Onruet, Rane
APPLICANT: Muriach, James G.
APPLICANT: Kumble, Krishanand D.
TITLE OF INVENTION: Compositions Isolated from Skin Cells
TITLE OF INVENTION: Compositions Isolated from Skin Cells
TITLE OF INVENTION: and Methods for Their Use
FILE REFERENCE: 11000.1011c2
CURRENT FILING DATE: 1999-05-14
NUMBER OF SEQ ID NOS: 425
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 38
LENGTH: 766
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                729 CCATCTCTTGTGCTCCAGACTTCATCACAGGCTGCTTTTT 770
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    694 CCAGCTCGCCTGCGCACCAGACTTCATTACAAGTGGCTTTTTT 735
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; Sequence 38, Application US/09312283C; Patent No.:6573095; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Watson, James D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 13
US-09-312-283C-38
                                                                                                                                                                                                                            191
                                                          ઠે
                                                                                            g
                                                                                                                                           à
                                                                                                                                                                             q
                                                                                                                                                                                                                 ठ
                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                           d
                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              gg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               a
                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
```

```
7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        548
                                                                                                                                                                                                                                                                                                                                        71 GCCAGCAGAGCCGGAAAGCGCGCGCCCCGGGCAGAAAAGCCGAGCAGAGCTGGGTGGCGTC 130
                                                                                                                                                                                                                                                                                                                                                                                                                       72 degadecgadecadadadadadecigrderrgaaaccgadaaccaadecdddecgdddarc 131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               131 recessors contesa con consequence and reconsers con a second contest and second conte
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  132 CCCCGGCCGCCGCACGCACAGGCCCGCCCCTCCTTGCCTCCCTGCTCCC-CACCGCGCC 190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                191 CCTCCGGTCAGCATGAGGCTCCTGGCGGCCGCGCTGCTGCTGCTGCTGGTGGCGCTGTAC 250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       251 ACCCCCCAGTGGACGGGTCCAAATGCAAGTGCTCCCGGAAGGGACCCAAGATCCGCTAC 310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             251 GCCTCGCGCGTGGACGGGTCCAAGTGTAAGTGTTCCCGGAAGGGGCCCAAGATCCGCTAC 310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   609 AAAAAGCCTTTCTTTCTCACAGGCATAAGACACAAATTATATATTGTTATGAAGCACTTT 668
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  669 TTACCAACGGTCAGTTTTTACATTTTATAGCTGCGTGCGAAAGGCTTCCAGATGGGAGAC 728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     70
                                                                                                                                                                                                                                                APPLICANT: SPECET, THOMAS
APPLICANT: SPECET, THOMAS
APPLICANT: HIMMANN, BERND
APPLICANT: SCHMITT, ARMIN
APPLICANT: PILARSKY, CHRISTIAN
APPLICANT: PILARSKY, ANDRE
APPLICANT: POSTERRAL, ANDRE
TITLE OF INVENTION: HUMAN NUCLEIC ACID SEQUENCES FROM UTERUS TUMOR TISSUE
FILE REFERENCE: ALBRE-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        311 AGCGACGTGAAAAGCTGGAAATGAAGCCAAAGTACCCGCACTGCGAGGAGAAGATGGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    431 AGCTGCAGAGCACCAAACGCTTCATCAAGTGGTACAATGCCTGGAACGAAAGCGCAGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        489 TCTACGAAGAATAGGGTGAAAAACCTCAGAAGGGAAAACTCCAAACCAGTTGGGAGACTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             551 CAGCAGAGGACTTTGCAGATT-----AAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   371 ATCATCACCACC-AAGAGCGTGTCC-AGGTACCGAGGTCAGGAGCACTGCCTGCACCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      429 AGCTGCAGAGCACCCATCATCAAGTGGTACAACGCCTGGAACGAGAAGCGCAGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       491 rcraccaacaaraggerogacgarcarcgaaagaaaaaacrccaggccagrrgagagacrr
                                                                                                                                                                           11 GCGCAGAGCGCAGCGCACACGACAGACAGCCTGGGCATCCACCGACGGCGCAGCCGGA
Query Match 25.3%; Score 426; DB 4; Length 766;
Best Local Similarity 79.5%; Pred. No. 1.1e-90;
Matches 606; Conservative 0; Mismatches 115; Indels 41; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         729 CCATCTCTTGTGCTCCAGACTTCATCACAGGCTGCTTTTT 770
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       694 CCAGCTGCCTGCGCACCAGACTTCATTACAAGTGGCTTTTT 735
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 14
US-09-673-395A-59/c
Sequence 59, Application US/09673395A
Patent No. 6620923
GENERAL INFORMATION:
                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  \overset{\circ}{\circ}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              d
```

```
CURRENT APPLICATION NUMBER: US/09/673,395A US/URRENT FILING DATE: 2000-10-17 UMBER OF SEQ ID NOS: 637 SOFTWARE: PATENTIN VEY. 2.1
                                                                                                                                        ORGANISM: Homo sapiens
                                                                                                                                                              US-09-673-395A-59
                                                                               SEQ ID NO 59
LENGTH: 1630
                                                                                                                           TYPE: DNA
```

ď ઠે ВÞ δ g  $\dot{\delta}$ 임 à 셤 ò d à g ઠ g

1140 AAACATTTCCAAGATCCTGTGAT-GGCGAGACAAATGATCCTTAAAGAAGG---TGTGGG 1195 962 GCTGCCACGGGCTCTCCCTGGGCTTATGGCCGGTCACAGCCTCAGTGTGACTCCACAGTGG 1021 CCCCTGTAGCCGGGCAAGCAGGAGCAGGTCTCTCTGCATCTGTTCTCTGTGAGGAACTCAAG 1081 397 GCTGCCACGGGCTCTCCTGGGCTTATGGCCGGTCACACCTCAGTGTGACTCCCACAGTGG 338 337 CCCTGTAGCCGGGCAAGCAGGAGCAGGTCTCTCTGCATCTGTTCTCTGAGGAACTCAAG 278 277 ITTGGTTGCCAGAAAATGTGCTTCATTCCCCCCTGGGTTAATTTTTACACACCCTAGGG 218 217 AAACATTTCCAAGATCCTGTGATGGGGGGAGAAATGATGATCCTTAAAAGAAGGTTTGGGGG 158 842 ACATCTGAGCTTTATAAGCGCCCGGGAGGAACAATGAGCTTGGTGGACACATTTCATTGC 901 902 AGTGTTGCTCCATTCCTAGCTTGGGAAGCTTCCGCTTAGAGGTCCTGGCGCCTCGGCACA 961 1196 GTCTTTCCCAACCTGA-GGATTTCTGAAAGGTTCACAGGTTCAATATTTAATGCTT 1250 517 ACATCTGAGCTTTATAAAGCACCGGGAGGAACAATGAGCTTTGGTGGACACTTTCATTGC 782 GAAAACTCAIGCCITICCTTTTAAAAATGCTTTTTTGTATTTGTCCATACGTCACTAT 157 reritricecaacergaggerritrigaaaggireacaggiricaaagiarriaair 102 Query Match 20.9%; Score 352.8; DB 4; Length 1630; Best Local Similarity 90.8%; Pred. No. 2.5e-73; Matches 432; Conservative 0; Mismatches 37; Indels 7; 1022 1082

```
Sequence 200.2, Application US/09188930A

Sequence 200.2, Application US/09188930A

Patent No. 6155502

GENERAL INFORMATION:

APPLICANT: Strachan, Lorna

APPLICANT: Steaman, Matthew

APPLICANT: Sleeman, Matthew

APPLICANT: Only 1. Rene

APPLICANT: Marison, James Greg

TITLE OF INVENTION: Compositions Isolated From Skin Cells

TITLE OF INVENTION: and Methods For Their Use

TITLE OF INVENTION: and Methods For Their Use

CURRENT APPLICATION NUMBER: US/09/188, 930A

CURRENT FILING DATE: 1998-11-09

NUMBER OF SEQ ID NOS: 348

SOFTWARE: FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA
CRGANISM: Mouse
US-09-188-930-270
RESULT 15
US-09-188-930-270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQ ID NO 270
LENGTH: 288
```

ö

Gaps . 0

Query Match
17.1%; Score 288; DB 3; Length 288;
Best Local Similarity 100.0%; Pred. No. 1.8e-58;
Matches 288; Conservative 0; Mismatches 0; Indels

```
ò
                            ద
                                                    g
                                                                              ద
g
                                         ò
                                                                    ò
                                                                                            8
                                                                                                                                                                                                          TITGGITGCCAGAAAATGTGCCTTCATTCCCCCCT-GGTTAATTTTTACACACCCTA-GG 1139
                                                                                                                 458
```

```
275 TOCAAGTGCTCCCGGAAGGGACCCAAGATCCGCTACAGGAGGTGGAAGTGGAAATG 334
                                                                                                                                                                                                                                                                                                                                                         121 AAGCCAAAGTACCCGCACTGCGAGGAGAAGATGGTTATCATCACCACCAAGAGGGTGTCC 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               215 GCGGCCGCGCTGCTGCTGCTGCTGCTGCTGTACACCGCGCGTGTGGACGGGTCCAAA 274
                                                                                                                                                                                                                            61 recaagrecreedgaaggaagecaagareegrackgegaegreaagaaggaageregaare 120
                                                                                                                                                                                                                                                                                                       335 AAGCCAAAGTACCCGCACTGCGAGGAGAAGATGGTTATCATCACCACCAAGAGCGTGTCC 394
                                                                                                                                                                                                                                                                                                                                                                                                                                                             395 AGGTACCGAGGTCAGGAGCACTGCCTGCACCCCAAGCTGCAGAGCACCACCAAGCGCTTCATC 454
                                         1 GCGGCCGCGCTCCTCCTGCTGCTGCTGCTGTACACCGCGCGTGTGGACGGGTCCAAA 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         241 AAGTGGTACAACGCCTGGAACGAGAAGCGCAGGGTCTACGAAGAATAG 288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               455 AAGTGGTACAACGCCTGGAACGAGAAGCGCAGGGTCTACGAAGAATAG 502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Search completed: April 26, 2004, 10:29:53 Job time : 141 secs
```

```
095715 homo sapien 095715 homo sapien 0210/47 ratus norv 210889 mus musculus 2108875 homo sapien 24675 be taurus 64677 hos taurus 64676 homo sapien 67831 homo sapien 6785 cavia provectolagus 6785235 cavia prove 655235 cavia prove 655235 cavia prove 655235 cavia musculu 670746 mus musculu 670746 mus musculu 670746 mus musculu 670735 homo sapien 680221 homo sapien 680221 homo sapien 6722 homo sapien 6722 homo sapien 6722 homo sapien 6722 homo sapien 671324 canis famil
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   homo sapien
ovis aries
rattus norv
bos taurus
oryctolagus
bos taurus
homo sapien
homo sapien
bos taurus
mus musculu
rattus norv
cavia porce
sus scrofa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   mus musculu oryccolagus homo sapien homo sapien homo sapien homo sapien homo sapien canis famil fells silve sus scrofa h platelet homo sapien rattus norv homo sapien homo sapien
                                                                   April 22, 2004, 12:26:32; Search time 17 Seconds (without alignments) 339.987 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                   Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                             US-09-978-189-370
587
1 MSLLPRRAPPVSMRLLAAAL.....TKRFIKWYNAWNEKRRVYEE 111
                                                                                                                                                                                                                                                                                                                                                                                                                                      Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Q9x8x5
P26894
P02775
Q9y258
P97885
GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
                                                                                                                                                                                                                         Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                141681 seqs, 52070155 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                           $214_HUMAN

$214_MUUSE

MI24_MUUSE

GRO_CRIGR

MI25_HUGAN

GRO_SHEEP

MI25_HUGAN

GRO_BOVIN

SZO_HUMAN

SZO_HUMAN

SZO_HUMAN

SZO_HUMAN

SZO_HUMAN

ILB_CANFA

ILB_FELCA

ILB_FELCA

ILB_FELCA

ILB_FELCA

ILB_FELCA

SZO_HUMAN

SZO_HUMAN
                                                                                                                                                                                                                                                                                                                                                                                                    SUMMARIES
                                                                                                                                                                                                                                                                                Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                              protein search, using sw model
                                                                                                                                                               BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                               seq length: 0
seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                       DB
                                                                                                                                                                                                                                                                                                                                 SwissProt_42:*
                                                                                                                                                                                                                                                                                                                                                                                                                                       Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     %
Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                               527
138 89
138 138 128 5
128 5
128 5
112 5
112 5
111 5
111 5
111 1
111 1
104 5
103 1
                                                                                                                  Title:
Perfect score:
                                                                                                                                                               Scoring table:
                                                                                                                                                                                                                                               Minimum DB Maximum DB
                                                                                                                                                                                                                                                                                                                                  Database :
                                                OM protein
                                                                                                                                          Sequence:
                                                                                                                                                                                                  Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3221098765432109876
3333000876543210
                                                                       Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                             Result
                                                                                                                                                                                                                                                                                                                                                                                                                                          Š.
```

homo sapien mus musculu	bos taurus gallus gall	ovis aries	nomo sapien mus musculu	equus cabal h small ind	s rattus norv 1 oryctolagus
P02776 P17515	P79255 1 P08317	P36925	P42830 P50228	062812 P55774	P06765
PLF4 HUMAN SZ10 MOUSE	IL8 BOVIN EMF1_CHICK	SZ07 PIG IL8 SHEEP	SZ05_HUMAN SZ05_MOUSE	ILB HORSE SY18 HUMAN	PLF4_RAT IL8_RABIT
44	н н	4 4	7		<del>~</del>
101	101	119	114	97 89	105
13.8	13.7	13.6 13.5	13.0 12.9	12.9	12.4
81 80.5	80.5	80 79.5	76.5	75.5	72.5
3.4 3.5	36	3 8 8 6 8 6	4 4 4 1 4 1	42	4 4 4 0

## ALIGNMENTS

PT.  1997[5]: Q86U99; Q9BTR1;  214 HTMAN STANDARD;  19.0-MAY-2000 (Rel. 39; Created)  19.0-MAY-2000 (Rel. 39; Late sequence update)  19.0-MAY-2000 (Rel. 30; Late Subdate)  10.0-MAY-2000 (R
--

II,

```
This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is no way modified and this statement is not removed. Usage by and for no modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                     Wang L., Déng L., Raikwar N., Sahota A., Tischfield J.A.;
"Identification of a kidney-expressed chemokine (KEC), a member of the CXC family, that is selectively elevated in aprt knockout mice.";
Submitted (OCT-1999) to the EMBL/GenBank/DDBJ databases.
-: SUBCELLUIAR LOCATION: Secreted (Potential).
-: SIMILARITY: Belongs to the intercrine alpha (chemokine CxC)
- family.
           MEDIINE-99160416; PubMed=10049774; Hromas R., Broxmeyer H.E., Kim C., Nakshatri H., Christopherson K. Azam M., Hou Y.-H.; "Cloning of BRAK, a novel divergent CXC chemokine preferentially expressed in normal versus malignant cells."; Blochem. Biophys. Res. Commun. 255:703-706(1999).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EMBL, AF153377, AAD34157.1;

EMBL, AF192857, AAF03753.1;

MCD, MGI:1888514; CXC14;

InterPro, IPRO01081; CXC-dmkine_ILB.

InterPro, IPRO01089; CXC-dmkine_smll.

PFam; PF00048; ILB; 1.

PROSITE; PS0041; SMALL_CYTOKINES_CXC; FALSE_NEG.
CYCOKine; Signal.
                                                                                                                                                                                                                          SEQUENCE FROM N.A.
STRAIN=C3H;
  SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 3
MI2B RAT
ID MI2B RAT
AC Q10747;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CHAIN
DISULFID
DISULFID
CONFLICT
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local S
  SOLUTION DE LA LINE DE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                           This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@lsb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  09
Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,
Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;
Generation and initial analysis of more than 15,000 full-length
human and mouse cDNA sequences.",
Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
-!- FUNCTION: Not chemotactive for T-cells, monocytes,
natural killer cells or ghranulocytes. Does not inhibit
proliferation of myeloid progenitors in colony formation assays.
C. -: SUBCELLULAR LOCATION: Secreted.
-: TISSUE SPECTFICITY: Expressed in heart, brain, placenta, lung,
liver, skeletal muscle, kidney and pancreas. Highly expressed in
normal tissue without inflammatory stimuli and infrequently
c expressed in cancer cell lines.
-: SIMILARITY: Belongs to the intercrine alpha (chemokine CXC)
family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            13 MRLLAAALLLILLALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKYPHCEEKWVIITT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 MRLLAAALLLLLALYTARVDGSKCKCSRKGBXIRYSDVKKLENKPKYPHCEEKNVIITT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                89.8%; Score 527; DB 1; Length 99;
100.0%; Pred. No. 1.6e-50;
iive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             B14.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SMALL INDUCIBLE CYTOKINE BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             998802D8FC659C1D CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           73 KSVSRYRGQEHCLHPKLQSTKRFIKWYNAWNEKRRVYEE 111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            KSVSRYRGQEHCLHPKLQSTKRFIKWYNAWNBKRRVYEE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PEGM; PF00048; ILB; 1. _____ROSITE; PS00471; SMALL_CYTOKINES_CXC; FALSE_NEG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EMBL, AF073957, AAD03839.1; -.
EMBL, AF144103; AAD3944.1; -.
EMBL, BT007080; AAD3544.1; -.
EMBL, BC003513; AAD3543.1; ALT_INIT.
EMBL, BC003513; AAH03513.1; ALT_INIT.
Genew, HGNC:10640; CXCL14.
MIM, 604186. -.
GO; GO:0007267; F:chemokine activity; TAS.
GO; GO:0007267; P:cell-cell signaling; TAS.
GO; GO:0007367; P:signal transduction; TAS.
INTERPRO; IPR001811; Chemokine_ILB.
INTERPRO; IPR001089; CXC_Chmkine_IMB.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                99 AA; 11772 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  99; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 99; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 2
S714 MOUSE
S714 MOUSE
D 5214 M AC C9WUGS,
DT 30-MAY.
DT 10-OCT.
DE Small:
DE Small:
DE Small:
CXCL14
CXCL14
CX MB MUU
CXCL14
CXC MB MUU
CXC MB MU
           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 \dot{\delta}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
```

```
72
                                                                                                                                                                          13 MRLLABALILLILALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKYPHCEEGVVIITT
                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Merazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus
NCBI_TaxID=10116;
                                                                                                                                                                                                                                                                                                                                                       01-0cT-1996 (Rel. 34, Created)
10-0cT-2095 (Rel. 34, Last sequence update)
10-0cT-2003 (Rel. 42, Last annotation update)
Macrophage inflammatory protein-2-beta precursor (MIP2-beta) (CINC-
                                                                                                                                 .
POTENTIAL.
SMALL INDICIBLE CYTOKINE B14.
BY SIMILARITY.
F >> S (IN REF. 2).
754BD6CDA01CA25D CRC64;
                                                                                                Score 489; DB 1; Length 99;
Pred. No. 2.2e-46;
3; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STRAIN=Wistar;
MEDLINE=94318061; PubMed=8043001;
Nakagawa H., Komorita N., Shibata F., Ikesue A., Konishi
Pujioka M., Kato H.;
                                                                                                                                                                                                                    73 KSVSRYRGQEHCLHPKLQSTKRFIKWYNAWNEKRVYEE 111
                                                                                                                                                                                                                                           100 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A., AND SEQUENCE OF 33-100
               23 99 S
25 51 B
27 72 64 64 64 E9 AA; 11802 MW;
                                                                                                       83.3%;
91.9%;
                                                                                                                                   91; Conservative
                                                                                                                                                                                                                                                                                                                             STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                 Rattus norvegicus (Rat).
                                                                                                                     Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                    2-beta).
```

30-MAY-2000 (Rel. 39, Created)
30-MAY-2000 (Rel. 39, Last sequence update)
30-MAY-2003 (Rel. 42, Last annotation update)
Small inducible cytokine B14 precursor (CXCL14) (Chemokine BRAK)
(Kidhay-expressed chemokine CXC).
(Kidhay-expressed chemokine CXC).
Mus musculus (Mouse).

Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Bukaryota, Butheria; Rodentia; Sciurognathi; Muridae; Musinae; Mus.
[1]

99 AA

STANDARD;

MOUSE

m

```
This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss institute of Bioinformatics and the FNBL outstation the Buropean Bioinformatics institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .
.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2 APP-TRRLINAALLILLILMATSHQPSGTVVARELRCQCLKTLPRVDFENIQSLTVTPPG 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8 APPVSMRLLAAALLLLLLLALYTARVDGS------KCKCSRKGPKIRYSDVKKLEMKPKY 60
"Identification of cytokine-induced neutrophil chemoattractants (CINC), rat GRO/CINC-2 alpha and CINC-2 beta, produced by granulation tissue in culture: purification, complete amino acid sequences and characterization."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Match 24.4%; Score 143.5; DB 1; Length 100; Local Similarity 35.1%; Pred. No. 9e-09; es 34; Conservative 19; Mismatches 31; Indels 13; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                               Nakagawa H., Shidta S., Takano K., Shibata F., Kato H.,

"Cytokine-induced neutrophil chemoattractant (CINC)-2 alpha, a novel
member of rat GRO/CINCs, is a predominant chemokine produced by
lipopolysaccharide-stimulated rat macrophages in culture.";

Biochem. Biophys. Res. Commun. 220:945-948(1996).

-!- FUNCTION: May play a role in inflammation and exert its effects
on endothelial cells in an autocrine fashion.
-!- SUMCELLULAR LOCATION: Secreted.
-!- SIMILARITY: Belongs to the intercrine alpha (chemokine CxC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota, Metazoa; Chordata; Craniata, Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MACROPHAGE INFLAMMATORY PROTEIN-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BY SIMILARITY.
BY SIMILARITY.
: EB53ECEFE30909D2 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PIR, S46198; S46198.

HSSP; P1089; 1M12.

InterPro; IPR0101811; Chemokine ILB.

InterPro; IPR010189; CXC_chmkine_smll.

Pfam; PF00048; ILB; 1.

SMART; SM00199; SCY; 1.

SMORTF; SR00471; SMALL, CYTOKINES CXC; 1.

CYTOKINE; Chemotaxis; Inflammatory response; Signal.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Macrophage inflammatory protein 2 precursor (MIP2). CXCL2 OR SCYB2 OR MIP2 OR MIP-2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61 PHCTQTEVIATLKD-----GGEVCLNPQAPRLQKIIQ 92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61 PHCEEKMVIITTKSVSRYRGQEHCLHPKLQSTKRFIK 97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-JUL-1989 (Rel. 11, Created)
01-FEB-1991 (Rel. 17, Last sequence update)
10-OCT-2003 (Rel. 42, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2-BETA
                                                                                                                                                                                                                                                                                                                                                                           LINE=96183056; PubMed=8607872;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
MEDLINE-90354792; PubMed-2201751;
                                                                                                                                                                                                  Biochem. J. 301:545-550(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           10989 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EMBL; D21095; BAA04657.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .37
.39
100 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mus musculus (Mouse)
                                                                                                                                                                                                                                                                                       SEQUENCE OF 33-52.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                           STRAIN=Wistar;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MIP2 MOUSE
P10889;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MIP2_MOUSE

AC PLOSES

DT 01-JUL-

DT 01-FBB-

DT 10-OCT-

DE MACICOP

OC MAMMALY

OC BUKARY

OC MAMMALY

OC MAMMA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CHAIN
     RATAR 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
```

```
This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the FNBL outstation the Buropean Bioinformatica Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2 APP-TCRLLSAALVLLILLATUHQATGAVVASELRCQCLKTLPRVDFKNIQSLSVTPPGP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8 APPVSMRLLAAALLLLLLLALYTARVDGS-----KCKCSRKGPKIRYSDVKKLEMKPKYP
                                                                                    SECUENCE OF 28-59.
MEDLINE-89098980; PubMed-2643119;
Wolpe S.D., Sherry B., Juers D., Davatelis G., Yurt R.W., Cerami A.;
"Identification and characterization of macrophage inflammatory
                                                                                                                                                                                                                         Shao W., Jerva L.F., West J., Lolis E., Schweitzer B.I.; "Solution structure of murine macrophage inflammatory protein-2."; Biochemistry 37:8303-8313(1998).

-1. FUNCTION: Chemotactic for human polymorphonuclear leukocytes but does not induce chemokinesis or an oxidative burst.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           12; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PERMYS; PRO048; ILB; 1.
PRINTS; PRO0497; SNALLCYTKCXC.
SMART; SNO199; SCY; 1.
PROSTIE; PS00411; SNALL CYTOKINES CXC; 1.
CYTOKINE; CHEMOTAXIS; Inflammatory response; Signal; 3D-structure.
                                                                                                                                                                                                                                                                                                    -1- SUBUNIT: Homotetramer.
-1- SUBCELLULAR LOCATION: Secreted.
-1- SIMILARITY: Belongs to the intercrine alpha (chemokine CxC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MACROPHAGE INFLAMMATORY PROTEIN 2.
'n
             Fabre M., van Deventer S., Cerami A.;
Cloning and characterization of cDNAs for murine macrophage
inflammatory protein 2 and its human homologues.";
J. Exp. Med. 172:911-919(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 100;
Tekamp-Olson P., Gallegos C., Bauer D., McClain J., Sherry
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         31; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               10621 MW; B9EF0A3218EE92B5 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   62 HCEEKMVIITTKSVSRYRGQEHCLHPKLQSTKRFIK 97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61 HCAQTEVIATLKG-----GQKVCLDPEAPLVQKIIQ 91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            23.5%; Score 138; DB 1; 33.3%; Pred. No. 3.6e-08; ive 21; Mismatches 31;
                                                                                                                                                                 Proc. Natl. Acad. Sci. U.S.A. 86:612-616(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PDB; 1MI2; 29-ARR-98.
MGD; MGI:1340094; Cxcl2.
InterPro; IPR001811; Chemokine ILB.
InterPro; IPR001089; CXC_chmkine_smll.
                                                                                                                                                                                                            MEDLINE=98285558; PubMed=9622482;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EMBL; X53798; CAA37807.1; -. PIR; JH0200; JH0200.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity 33.3
Matches 32; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100
62
78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4440077789
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100 AA;
                                                                                                                                                                                                                                                                                                                                                         family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                   protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TURN
HELIX
STRAND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TURN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TRAND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCRN
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ď
```

CXCL2 OR GRO2 OR SCYB2 OR GROB OR MIP2A. Homo sapiens (Human).

```
This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10 PVSMRLLAAALLLLLLALYTARV-----DGSKCKCSRKGPKIRYSDVKKLEMKPKYPH 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MI2A HUMAN STANDARD; PRT; 107 AA.
P19875; Q9UPB8;
01-FBB-1991 (Rel. 17, Created)
01-FB-1991 (Rel. 42, Last sequence update)
10-OCT-2003 (Rel. 42, Last annotation update)
Macrophage inflammatory protein-2-alpha precursor (MIP2-alpha) (CXCL2)
(Growth regulated protein beta) (Gro-beta).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               32; Indels 12; Gaps
                                                                                                                                                                                       Cricetulus griseus (Chinese hamster).

Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi; Mammalia; Butheria; Rodentia; Sciurognathi; Muridae; Cricetinae; Cricetulus.
                                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE=88041072; PubMed=2890161; MEDLINE=88041072; PubMed=2890161; Anisowicz A., Bardwell L., Sagar R.; Constitutive oversexpression of a growth-regulated gene in transformed Chinese hamster and human cells."; Proc. Natl. Acad. Sci. U.S.A. 84;7188-7192(1987).
-! FUNCTION: Has chemotactic activity for neutrophils.
-! SUBCELLULAR LOCATION: Secreted.
-! SIMILARITY: Belongs to the intercrine alpha (chemokine CXC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 22.3%; Score 131; DB 1; Length 101; 31.6%; Pred. No. 2.1e-07;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PROSITE; PS00471; SMALL_CYTOKINES_CXC; 1.
Cytokine; Growth factor; Inflammatory response; Signal.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      666FB7E9CC512019 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GROWTH REGULATED PROTEIN. BY SIMILARITY. BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CEEKMVIITIKSVSRYRGQEHCLHPKLQSTKRFIK 97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-MAR-1989 (Rel. 10, Created)
01-MAR-1989 (Rel. 10, Last sequence update)
10-007-2003 (Rel. 42, Last annotation update)
COCLI OR SCYBI OR GRO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               21; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EMBL; J03560; AAA36985.1; -.
PIR; B28414; B26414.
HSSP; P19875; 1QNK.
InterPro; IPR001811; Chemokine IL8.
InterPro; IPR00189; CXC_chmkine_smll.
PETM; PR00048; IL8; I.
PRINTS; PR00437; SMALLCYTKCXC.
SMART; SM00199; SCY; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     29 101 GEG
37 63 BY
39 79 BY
101 AA; 10893 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               30; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                   NCBI_TaxID=10029;
CRIGR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 6
MI2A HUMAN
MI2A HUMAN
AC P19875;
DT 01-FEB.
DT 10-OCT.
DE MACTOPI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                               DDT THE THE TENT OF THE TENT O
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
```

```
This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TISSUE=EYE.

WEDLINE=22388257; Pubmed=12477932;
Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
Strausberg R.L., Collins F.S., Wagner L., Sheimen C.M., Schuler G.D.,
Rlausner R.D., Collins F.S., Wagner L., Sheimen C.M., Schuler G.D.,
A Altschul S.F., Zeeberg B., Buetow K.H., Scheefer C.F., Bhat N.K.,
Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
Diatchenko L., Marusha R., Farmer A.A., Rubin G.M., Hong L.,
Bighleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
Brownstein M.J. Ugdin T.B., Toshiyuki S., Carninci P., Prange C.,
Braha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
Raha S.S., Morley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
Nillalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
Rutcarfield Y.S.N., Krzywinski M.I., Skalska U., Smallus D.E.,
Generation and mouse cDNA sequences ",
Generation and initial analysis of more than 15,000 full-length
Human and mouse cDNA sequences",
F10
                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
MEDLINE=90377259; PubMed=2078213;
Iida N., Grotendorst G.R.;
"Cloning and sequencing of a new gro transcript from activated human monocytes; expression in leukocytes and wound tissue.";
Mol. Cell. Biol. 10:5596-5599(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDLINE=91017578; PubMed=2217207;
MEDLINE=91017578; PubMed=2217207;
Haskill S., Peace A., Morris J., Sporn S.A., Anisowicz A., Lee S.W.,
Smith T., Martin G., Ralph P., Sager R.;
"Identification of three related human GRO genes encoding cytokine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDLINE=2006929; PubMed=10600366;
MEDLINE=2006929; PubMed=10600366;
Malon Y.Q., Johanson K.O., McDevitt P.,
Nuclear magnetic resonance solution structure of truncated human GRObeta [5-73] and its structural comparison with CXC chemokine family members GROALpha and 11-8".",
J. Mol. Biol. 294:1065-1072(1999).
-!- FUNCTION: Produced by activated monocytes and neutrophils and expressed at sites of inflammation.
-!- SUBCELLULAR LOCATION: Secreted.
-!- SUMCELLULAR LOCATION: Secreted.
                            homo appens, fundatu.
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                     TISSUBEHISTICOYLIC lymphoma;
MEDLINE=90354792; PubMed=2201751;
Tekamp-Olson P., Gallegos C., Bauer D., McClain J., Sherry B.,
Tekamp-Olson P., Carlegos C., Carani A.;
"Cloning and characterization of cDNAs for murine macrophage
inflammatory protein 2 and its human homologues.";
[2]
Exp. Med. 172:911-919(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Jang J.S., Kim B.E.;
Submitted (JAN-1998) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Proc. Natl. Acad. Sci. U.S.A. 87:7732-7736(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE OF 35-107 FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STRUCTURE BY NMR OF 39-107.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
                                                                                                                              SEQUENCE FROM N.A.
                                                                                  NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          family.
```

```
use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ري
د.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8 APPVSMRLLAAALLILLILALYTARVDGS-----KCKCSRKGPKIRYSDVKKLEMKPKYP 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8 AAPSNPRILRVALILILIVAASRRAAGAPLATELRCQCLQTLQGIHLKNIQSVKVKSPGP 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       / Match 21.9%; Score 128.5; DB 1; Length 107; Local Similarity 33.3%; Pred. No. 4.2e-07; nes 32; Conservative 18; Mismatches 35; Indels 11; Gaps
                                                                                                                                                                                                             MIM; 119110; -. C:extracellular space; TAS.

GO; GO:0005615; C:extracellular space; TAS.

GO; GO:0005625; C:soluble fraction; TAS.

GO; GO:0006925; P:chemokine activity; TAS.

GO; GO:0006925; P:chemokine activity; TAS.

GO; GO:0006925; P:inflammatory response; TAS.

InterPro; IPRO10181; Chemokine_Inf.

InterPro; IPRO10189; CXC_chmkine_smll.

Ffam; PF00048; ILB; 1.

SWART; SM00199; SCY; 1.

PROSITE; PS00471; SMALL_CYTOKINES_CXC; 1.

Cyrokine; Chemotaxis; Inflammatory response; Signal; 3D-structure.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JOHNAY-2000 (Rel. 39, Created)
30-MAY-2000 (Rel. 39, Last sequence update)
10-CCT-2003 (Rel. 42, Last annocation update)
10-CCT-2003 (Rel. 42, Last annocation update)
Growth regulated protein precursor (CXCLI).
CXCLI OR SCYBI OR GRO.
CXCLI OR SCYBI OR GRO.
CXCLI OR ACASOS (CHORDAR OF ANNOCATION)
BURARYOLS (Shepl).
Mammalia, Butheria, Cetartiodactyla, Ruminantia, Pecora, Bovoidea,
Bovidae, Caprinae; Ovis.
                                                                                                                                                                                                                                                                                                                                                                                              MACROPHAGE INFLAMMATORY PROTEIN-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 102
11389 MW; 740F277E928571BA CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         62 HCBEKMVIITTKSVSRYRGOEHCLHPKLOSTKRFIK 97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 68 HCAQTEVIATLKN----GOKACLNPASPMVKKIIE 98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          103 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
MEDLINE=99152612; PubMed=10028286;
Modi W.S., Yoshimura T.;
                                                                                                          EMBL, M36820, AAA63183.1; --
EMBL, M87731, AAA63182.1; --
EMBL, BCO15753; AAH15723.1; --
EMBL, AF043340, AAC03540.1; --
PIR, JH0281, JH0281.
                                                                                            EMBL; X53799; CAA37808.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STANDARD:
                                                                                                                                                                                              HGNC:4603; CXCL2.
                                                                                                                                                                                                                                                                                                                                                                                34
                                                                                                                                                                                                                                                                                                                                                                                                                         107 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NCBI_TaxID=9940;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GRO SHEEP
046678;
                                                                                                                                                                                                                                                                                                                                                                                                                         DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                     DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                            Genew;
MIM; 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STRAND
                                                                                                                                                                                                                                                                                                                                                                                SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                   STRAND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TRAND
                                                                                                                                                                                                                                                                                                                                                                                               CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GRO SHEEP
             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
```

```
This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation—the Buropean Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@ib-sib.ch).
                                                                                                                                                                                                                                                        EMBL; U9S814; AAB93930.1; -.
HSSP; P19875; LQNK.
InterPro; IPR001881; Chemokine_ILB.
InterPro; IPR00189; CXC_chmkine_smll.
Pfam; PF00048; ILB; 1.
PRINTS; PR00487; SMALLCYTKCXC.
SMART; SM00199; SCY; 1.
PROSITE; PS00471; SMALL_CYTOKINES_CXC; 1.
CYCOKINE; GXOWth factor; Inflammatory response; Signal.
SIGNAL 1 30 POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           7 RAPPVSMRLLAAALLLLLLLLLTALYTARVDGS-----KCKCSRKGPKIRYSDVKKLEMKPKY 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3 RAANPAPRILGAAMILILILVAAGRRAAGAPVVNEIRCQCLQTVQGIHLKNMQSVKVTPPG 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Rattus norvegisus (rat).
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
"Isolation of novel GRO genes and a phylogenetic analysis of the CXC chemokine subfamily in mammals.";
Mol. Biol. Bvol. 16:180-193(1999).
-!- FUNCTION: Has chemotactic activity for neutrophils.
-!- SUBCELLULAR LOCATION: Secreted.
-!- SIMILARITY: Belongs to the intercrine alpha (chemokine CxC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      11; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STRAIN=Fischer;
MEDLINE=9518993; PubMed=7883948;
MEDLINE=95189933; PubMed=7883948;
MEDLINE=95189933; PubMed=7883948;
Modulation of neutrophil influx in glomerulonephritis in the rat with anti-macrophage inflammatory protein-2 (MIP-2) antibody.";
J. Clin. Invest. 95:1009-1017(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              21.7%; Score 127.5; DB 1; Length 103; 34.4%; Pred. No. 5.1e-07;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-APR-1993 (Rel. 25, Created)
01-APR-1993 (Rel. 25, Last sequence update)
15-MAR-2004 (Rel. 43, Last amnotation update)
Macrophage inflammatory protein 2 precursor (MIP2) (CINC-3).
CXCL2 OR SCYB2 OR MIP2 OR MIP-2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    16; Mismatches 36; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Driscoll K.;
Submitted (APR-1992) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GROWTH REGULATED PROTEIN.
BY SIMILARITY.
BY SIMILARITY.
; C59857F346716695 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          63 PHCGQTEVIATLKT----GQEVCLNPAAPMVKKII 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61 PHCEEKMVIITTKSVSRYRGQEHCLHPKLQSTKRFI 96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
STRAIN=CD Charles River; TISSUE=Lung;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STRAIN=Fischer 344; TISSUE=Lung;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   31 103 GR
39 65 BY
41 81 BY
103 AA; 10820 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    33; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Rattus norvegicus (Rat)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NCBI_TaxID=10116;
                                                                                                                  family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MIP2 RAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
      ò
```

2 APPTROLLNAVLVLLLLLATNHQGTGVVVASELRCQCLTTLPRVDFKNIQSLTVTPPGPH 61

```
SOLUTION SOLUTION SELECTION SELECTIO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                      à
                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the FWBL outstation. the Buropean Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isp-sib.ch).
                                                                                                                                                                                                                                                                                                                                     MEDLINE=94318661; PubMed=8043001;
Nakagawa H., Komorita N., Shibata F., Ikesue A., Konishi K.,
Fujioka M., Kato H.,
"Identification of cytokine-induced neutrophil chemoattractants
"Identification of cytokine-induced neutrophil chemoattractants
(CINC), rat GRO/CINC-2 alpha and CINC-2 beta, produced by granulation tissue in culture: purification, complete amino acid sequences and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -:- SUBCELLULAR LOCATION: Secreted.
-:- TISSUE SPECIFICITY: At least expressed in the lung and trachea.
-:- INDUCTION: By lipopolysaccharide (LPS) and inflammation; in lung.
-:- SIMILARITY: Belongs to the intercrine alpha (chemokine CxC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ch 21.1%; Score 124; DB 1; Length 100;
1 Similarity 33.7%; Pred. No. 1.2e-06;
32; Conservative 16; Mismatches 37; Indels 10; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDITAR 36183056; PubMed=8607872; Shibata F., Kato H.; Naiota S., Takano K., Shibata F., Kato H.; Shiota S., Takano K., Shibata F., Kato H.; Induced neutrophil chemoattractant (CINC)-2 alpha, a novel "Cytokine-induced neutrophil chemoattract chemoxine produced by lipopolysaccionatide-stimulated rat macrophages in culture."; Piochem. Biophys. Res. Commun. 220:945-94811996).

FUNCTION: Chemotactic for human polymorphonuclear Leukocytes but does not induce chemokinesis or an oxidative burst. Contributes the neutrophil activation during inflammation.
                                                                                                         TISSUE-Lung,
MEDLINE-1930315653; PubMed-1415488;
Huang S., Paulauskis J.D., Godleski J.J., Kobzik L.;
"Expression of macrophage inflammatory protein-2 and KC mRNA in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MACROPHAGE INFLAMMATORY PROTEIN 2.
Farone A., Farone M., Shi M.M., Kobzik L., Paulauskis J.D.; Submitted (MAR-1996) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BY SIMILARITY.
BY SIMILARITY.
7 4299DFE68FF37A9B CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SMART, SM0199; SCY; 1.
SMALL CYTOKINES CXC; 1.
Cytokine; Chemotaxis, Inflammatory response; Signal.
SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     InterPro; IPR001811; Chemokine IL8.
InterPro; IPR001089; CXC_chmkine_smll.
Pfam; PF00048; IL8; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EMBL, X65647, CAA46599.1; -.
EMBL, S77604, AAB33749.1; -.
EMBL, U45965, AAA2438.1; -.
EMBL, S45965; -, NOT_ANNOTATED_CDS.
PIR: S21467; S21467.
HSSP, P10889; 1M12.
                                                                                                                                                                                                                monary inflammation.";
J. Pathol. 141;981-988(1992).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     32 100 MAC
36 62 BY
38 78 BX
100 AA; 10783 MW; 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Biochem. J. 301:545-550(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRINTS; PR00437; SMALLCYTKCXC.
                                                                             SEQUENCE OF 39-91 FROM N.A.
                                                                                                                                                                                                                                                                                        SEQUENCE OF 32-100.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE OF 32-59.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DISULFID
```

```
This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the BNBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A InterPro; IPROGLOUS,

A InterPro; IPROGLOUS,

DR PAINTS; PROO437; SMALLCYTKCKC.

DR PAINTS; PROO447; SMALL_CYTCKCKC.

DR PROSITE; PROO471; SMALL_CYTCKINES_CKC; 1.

DR PROSITE; PROO471; SMALL_CYTCKINES_CKC; 1.

KW CYCCKINE; Growth factor; Inflammatory response, Signal.

FT SIGNAL

TOTALN 30 98 GROWTH REGULATED PROTEIN HOWOLOG GANWA.

TOTALN 39 65 BY SIMILARITY.

AN BY SIMILARITY.

TOTALN 942CD6897C21EDES CRC64;

TOTALN 942CD6897C21EDES CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8 APPVSM--RLLAAALLLLLALYTARVDGS-----KCKCSRKGPKIRYSDVKKLEMKPK 59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2 APAASSAPRILIRAAMILILILVAAGRRAAGAPVVNBIRCQCLQTLQGIHLKNIQSVKVTTP 61
                                                                                                                                                                                                                                                                                                                                                             MEDILINE=99152612; PubMed=10028286; Modi W.S., Yoshimura T.; PubMed=10028286; Modi W.S., Yoshimura T.; PubMed=100 of novel GRO genes and a phylogenetic analysis of the CXC chemokine subfamily in mammals."; Mol. Biol. Biol. 16:180-193(1999).
-i. SUBCELLULAR LOCATION: Secreted.
-i. SIMILARITY: Belongs to the intercrine alpha (chemokine CxC)
         15-DEC-1998 (Rel. 37, Created)
15-DEC-1998 (Rel. 37, Last sequence update)
10-OCT-2003 (Rel. 42, Last annotation update)
Growth regulated protein homolog gamma precursor (GRO-gamma).
Bos taurus (Bovine)
Bos taurus (Corie (GRO-gamma)).
Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Bovidae, Bovinei, Sos.
NCEL_TaxID=9913;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60 YPHCEEKMVIITTKSVSRYRGQEHCLHPKLQSTKRFI 96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          62 GPHCDQTEVIATLKT----GOEVCLNPAAPMVKKII 93
      98 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (Rel. 33, Created)
(Rel. 33, Last sequence update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HSSP; P19875; IQNK.
InterPro; IPR001811; Chemokine_ILB.
InterPro; IPR001089; CXC_chmkine_smll.
PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EMBL; U95811; AAB93927.1; -.
      STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 10
GRO2 RABIT
ID GRO2 RABIT
AC P47854;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-FEB-1996
01-FEB-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       family.
   GROG BOVIN
```

ω ,

8 APPVSMRLLAAAALLILILALY---TARVDGS--KCKCSRKGPKIRYSDVKKLEMKPKYPH 62

Matches

à

-

```
SEOUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DISULFID
DISULFID
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GRO HUMAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GRO HUMAN
                    ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCOCCOS SERVICES SER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformetics and the EMBL outstarion the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8 APPVSMRLLAAALLLLLLLLLALYTARVDGS-----KCKCSRKGPKIRYSDVKKLEMKPKYP 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           11; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Modi W.S., Yoshimura T.;
"Isolation of novel GRO genes and a phylogenetic analysis of the CXC chemokine subfamily in mammals.";
Mol. Biol. Evol. 16:180-1931(1999).
                                                                                                                                                                                                                                                                                                                                                     Submitted (JUL-1994) to the EMBL/GenBank/DDBJ databases.
-- FUNCTION: Plays a role in monocyte adhesion to the endothelium.
-- SUBCELLUTAR LOCATION: Secreted.
--- SIMILARITY: Belongs to the intercrine alpha (chemokine CxC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Bos taurus (Bovine).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia; Eutheria, Cetartiodactyla, Ruminantia, Pecora, Bovoidea,
Bovidae, Bovinae, Bos.
10-OCT-2003 (Rel. 42, Last annotation update)
Growth regulated protein homolog precursor (GRO homolog).
Oryctolagus cuniculus (Chordata).
Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi;
Mammalia, Eutheria; Lagomorpha, Leporidae; Oryctolagus.
                                                                                                                                                                                                                                                         Schwartz D., Chaverri-Alamada L., Berliner J., Kirchgessner T.,
Quisomoro D., Fang J., Tekamp-Olson P., Lusis J., Fogelman A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GROWTH REGULATED PROTEIN HOMOLOG. BY SIMILARITY. BY SIMILARITY. 1089D07865C77F67 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 1; Length 104;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              15-DEC-1998 (Rel. 37, Created)
15-DEC-1998 (Rel. 37, Last sequence update)
10-CCT-2003 (Rel. 42, Last annotation update)
Growth regulated protein homolog beta precursor (GRO-beta).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20.2%; Score 118.5; DB 1; Length 1
32.6%; Pred. No. Se-06;
tive 17; Mismatches 36; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ||:: || : |: |: |: |
65 HCDQTEVIASLKT----GQEVCLNPTAPVVKKII 94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    62 HCEEKWVIITTKSVSRYRGQEHCLHPKLQSTKRFI 96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PROBABLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             [1]
SEQUENCE FROM N.A.
MEDLINE=99152612; Pubmed=10028286;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   40 66 B
42 82 B
104 AA; 10900 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EMBL; U12310; AAA20487.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           31; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GROB BOVIN STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
                                                                                                                                                                       NCBI TaxID=9986;
                                                                                                                                                                                                                                                                                                                Territo M.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
          DANS SELECTION OF 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
```

```
This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the BNBL outstation the Burspean Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8 APPVSMRLLAAALLLLLLLLLALYTARVDGS-----KCKCSRKGPKIRYSDVKKLEMKPKYP 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5 ATAAAPRILIRAAMLILILIVAAGRRAAGAPVVNELRCQCLQTLQGTHLKNIQSVKVTTPGP 64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               / Match 20.0%; Score 117.5; DB 1; Length 104; Local Similarity 31.6%; Pred. No. 6.4e-06; nes 30; Conservative 18; Mismatches 36; Indels 11; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDINE=88328991; PubMed=2970963; Ricknord A., Balentien B., Thomas H.G., Flaggs G., Barton D.E., Richmond A., Balentien E., Thomas H.G., Flaggs G., Barton D.E., Spiess J., Bordoni R., Francke U., Derynck R., Molecular characterization and chromosomal mapping of melanoma growth stimulatory activity, a growth factor structurally related to beta-thromboglobulin.", EMBO J. 7:2025-2033(1988).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-MAR-1989 (Rel. 10, Created)
01-MAR-1989 (Rel. 10, Last sequence update)
01-MAR-1989 (Rel. 142, Last amnotation update)
Growth regulated protein precursor (CXCIL) (Melanoma growth stimulatory activity) (MGSA) (Neutrophil-activating protein 3) (NAP-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GROWTH REGULATED PROTEIN HOMOLOG BETA. BY SIMILARITY. BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
-!- SUBCELLULAR LOCATION: Secreted.
-!- SIMILARITY: Belongs to the intercrine alpha (chemokine CxC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Anisowicz A., Bardwell L., Sager R.; "Constitutive overexpression of a growth-regulated gene in transformed Chinese hamster and human cells."; Proc. Natl. Acad. Sci. U.S.A. 84:7188-7192(1987).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PROSITE; PSO0471; SMALL CYTOKINES CKC; 1.
Cytokine; Growth factor; Inflammatory response; Signal.
SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 40ABC06A64D67F7B CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          62 HCEEKMVIITTKSVSRYRGQEHCLHPKLQSTKRFI 96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   65 HCDQTEVLASLKT-----GĞEVCLNPTAPMVKKIİ 94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CXCL1 OR SCYB1 OR GRO1 OR GROA OR GRO OR MGSA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                107 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            InterPro; IPR001811; Chemokine_ILB.
InterPro; IPR001089; CXC_chmkine_smll.
Pfam; PF00048; ILB; 1.
PRINTS; PR00437; SMALLCYTKCXC.
SMART; SM00199; SCY; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
MEDLINE=88041072; PubMed=2890161;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             104 AA; 10950 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                  EMBL; U95813; AAB93929.1; -. HSSP; P19875; 1QNK.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      104
66
82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (Human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              _TaxID=9606;
```

```
MEDLINE=2238823;

MEDLINE=2238823;

MEDLINE=2238823;

Altachul S.F., Zeeborg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

Altschul S.F., Zeeborg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsich F.,

Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

As Expleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,

Brownstein M.J. Usdin T.B., Toshiyuki S., Carninci P., Prange C.,

Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,

Raha S.S., Morewan P.J., Mckernan K.J., Malek J.J., Hulyk S.W.,

Richards S., Worley K.C., Halle S., Garcia A.M., Gay L.J., Hulyk S.W.,

Yillalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,

Richards S., Worley K.C., Halle S., Garcia A.M., Gay L.J., Hulyk S.W.,

Whiting M., Madan A., Young A.C., Shevohenko Y., Bouffard G.G.,

Blakesley R.W. Touchman J.W., Green E.D., Dickson M.C.,

Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smallus D.E.,

"Generation and initial analysis of more than 15,000 full-length

"Fill

"Generation and initial analysis of more than 15,000 full-length

"Fill

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Golds E.E., Mason P., Nyirkos P., "Inflammatory cytokines induce synthesis and secretion of gro protein and a neutrophil chemotactic factor but not beta 2-microglobulin in human synovial cells and fibroblasts."; Biochem. J. 259:585-588(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE=89356550; PubMed=2670560;
Wen D., Rowland A., Derynck R.;
"Expression and secretion of gro/MGSA by stimulated human endothelial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE OF 35-65.

BEDLINE-20217938, PubMed=2182761;
Schroeder J.-M., Persono N.L.M., Christophers E.;
Schroeder J.-M., Persono N.L.M., Christophers E.;
"Lipopolysaccharide-stimulated human monocytes secrete, apart from neutrophil-activating peptide 1/interleukin 8, a second neutrophilactivating protein. NH2-terminal amino acid sequence identity with melanoma growth stimulatory activity.";
J. Exp. Med. 171:1091-1100(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Fairbrother W.J., Reilly D., Colby T., Horuk R.;
"It assignment and secondary structure determination of human melanoma growth stimulating activity (MGSA) by NMR spectroscopy.";
FEBS Lett. 330:302-306(1993).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDLINE=94376296; PubMed=8089846;
Fairbrother W.J., Reilly, D., Colby T., Hesselgesser J., Horuk R.;
"The solution structure of melanoma growth stimulating activity.";
J. Mol. Biol. 242:252-270(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE=95105175; PubMed=7806518;
Kim K.S., Clark-Lewis I., Sykes B.D.;
"Solution structure of GRO/melanoma growth stimulatory activity
determined by 1H NMR spectroscopy.";
                                               Baker N.E., Kucera G., Richmond A., "Nucleotide sequence of the human melanoma growth stimulatory activity (MGSA) gene.";
                                                                                                        activity (MGSA) gene.";
Nucleic Acids Res. 18:6453-6453(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE OF 35-57.
MEDLINE=89246368; PubMed=2655583;
                       MEDLINE=91057157; PubMed=2129556;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE=93387459; PubMed=8397104;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cells.";
EMBO J. 8:1761-1766(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              POSSIBLE FUNCTION.
                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STRUCTURE BY NMR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STRUCTURE BY NMR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STRUCTURE BY NMR.
```

```
EMBL, X12510; CAA31027.1; ...

EMBL, X24510; CAA31027.1; ...

EMBL, MAR. 95.

PDB; IMSH, 31-MAR. 95.

PDB; IMSH, 31-MAR. 95.

EMBL, IMSC, 31-MAR. 95.

EMBL, EMBL, IMAR. 95.

EMBL, EMBL, IMBL, IMB
                                                                                                                                                                   This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the BNBL outstation the Buropean Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8 APPVSMRLLAAALLLLLLLALYTARVDGS-----KCKCSRKGPKIRYSDVKKLEMKPKYP 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels 11; Gaps

    J. Biol. Chem. 269:32909-32915(1994).
    -!- FUNCTION: Has chemotactic activity for neutrophils. May play a role in inflammation and exerts its effects on endothelial cells in an autocrine fashion.
    -!- SUBCELLULAR LOCATION: Secreted.
    -!- SIMILARITY: Belongs to the intercrine alpha (chemokine CxC)

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20.0%; Score 117.5; DB 1; Length 107; 32.3%; Pred. No. 6.6e-06; ive 17; Mismatches 37; Indels 11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                35 107 GROWTH REGULATED PROTEIN.
43 69 44 45 44 45 49 49 54 56 57 63 73 78 80 88 89 89 89 81 1301 MW; 17048A6B4D765CA2 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   62 HCEEMWIITTKSVSRYRGQEHCLHPKLQSTKRFIK 97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            31; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
                                                                                                                                  family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STRAND
TURN
HELIX
TURN
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DISULFID
DISULFID
TURN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STRAND
STRAND
TURN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STRAND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              URN
    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ద
```

```
This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the buropean Bloinformatics institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                 01-FEB-1991 (Rel. 17, Created)
01-FEB-1991 (Rel. 17, Last sequence update)
10-0CT-2003 (Rel. 17, Last amoration update)
Macrophage inflammatory protein-2-beta precursor (MIP2-beta) (CXCL3)
(Growth regulated protein gamma) (GRO-gamma).
CXCL3 OR GRO3 OR SCYB3 OR GROG.
Homo sapiens (Human).
                                                                                                                                                                                                                                                                                       MEDLINE=91017578; PubMed=2217207; Haskill S., Peace A., Morris J., Sporn S.A., Anisowicz A., Lee S.W., Smith T., Martin G., Ralph P., Sager R.; Identification of three related human GRO genes encoding cytokine
                                                                                                                     Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                              TISSUB=Histiocytic lymphoma;
MEDLINE=9034792; PubMed=2201751;
Tekamp-Olson P., Gallegoe C., Bauer D., McClain J., Sherry B.,
Fabre M., van Deventer S., Cerami A.;
"Cloning and characterization of cDNAs for murine macrophage inflammatory protein 2 and its human homologues.";
J. Exp. Med. 172:911-919(1990).
                                                                                                                                                                                                                                                                                                                                                      Proc. Natl. Acad. Sci. U.S.A. 87:7732-7736(1990).
              107 AA.
                                                                                                                                                                                                                                                                                                                                                                                      TISSUE=Lung;
MEDLINE=22388257; PubMed=12477932;
              STANDARD;
                                                                                                                                                                       SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
                                                                                                                                              NCBI_TaxID=9606;
           MI2B HUMAN
P19876;
MIZB HUMAN
```

EMBL; X53800; CAA37809.1; -. EMBL; M36821; AAA63184.1; -.

```
This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the BWBL outstation the Buropean Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8 AAPSNPRLLRVALLLILLVAASRRAAGASVVTELRCQCLQTLQGIHLKNIQSVNVRSPGP 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8 APPVSMRLLAAALLLLLLLALYTARVDGS-----KCKCSRKGPKIRYSDVKKLEMKPKYP 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               19.8%; Score 116.5; DB 1; Length 107;
ilarity 30.2%; Pred. No. 8.4e-06;
Conservative 20; Mismatches 36; Indels 11; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDINE=99152612; PubMed=10028286; Modi W.S., Yoshimura T.; Asohimura T.; Yoshimura T.; Modi wool GR novel GRO Genes and a phylogenetic analysis of the CXC chemokine subfamily in mammals."; Mol. Biol. Evol. 16:180-193 (1999).
-1 SUBCELLULAR LOCATION: Secreted.
-1 SIMILARITY: Belongs to the intercrine alpha (chemokine CxC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MACROPHAGE INFLAMMATORY PROTEIN-
                                                                                                                                                                                                                                                                                                                                                                                                                                                           2-BETA.
43 69 BY SIMILARITY.
45 88 BY SIMILARITY.
27 28 AA -> G (IN REF. 2).
107 AA; 11342 MW; 97A69946B7FFF070 CRC64;
                                                                                                                 MIM, 139111;

GO, GO:0005615; C:extracellular space, TAS.

GO, GO:0008009; F:chemokine activity; TAS.

InterPro; IPR001891; Chemokine_ILB.

InterPro; IPR001891; CC, chmkine_mil.

Pam, FP00048; ILB; 1.

SMART; SM00199; SCY; 1.

Cytokine; Chemokine; CYTOXINES CXC; 1.

Cytokine; Chemotaxis; Inflammatory response; Signal.

SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  62 HCEEKWVIITTKSVSRYRGQEHCLHPKLQSTKRFIK 97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          68 HCAQTEVIATLKN----GKKACLNPASPMVQKIIE 98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   interPro; IPR01281; Chemokine_ILB.
InterPro; IPR01089; CXC_chmkine_smll.
Pfam; PF00048; ILB; 1.
PRINTS; PR00437; SMALLCYTKCXC.
SMART; SM00199; SCY; 1.
EMBL; BC016308; AAH16308.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EMBL; U95812; AAB93928.1; -.
                                                                                      Genew; HGNC:4604; CXCL3.
                   PIR; JH0282; B38290.
HSSP; P19875; 1QNK.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity
es 29; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NCBI_TaxID=9913;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DISULFID
DISULFID
CONFLICT
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                             CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEAR REPRESENTATION OF THE PROPERTY OF THE PRO
```

```
This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation -
                                                                                                                                                                                                                                                                                                                         2,
                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                                                                             MEDIINE-89139485; PubMed-2917992; Oquendo P., Alberta J., Wen D., Graycar J.L., Derynck R., Stilles C.D., "The platellet-derived growth factor-inducible KC gene encodes a secretory protein related to platelet alpha-granule proteins."; J. Biol. Chem. 264:4133-4137(1989).
                                                                                                                                                                                                                                                                                                                                                                                   8 APPVSMRLLAAALLLLLLLLALYTARVDGS-----KCKCSRKGPKIRYSDVKKLEMKPKYP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ξ̈́
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDINE=196016008; PubMed=7561058;

Ohmori Y., Fukumoto S., Hamilton T.A.;

Two structurally distinct Kappa B sequence motifs cooperatively control LPS-induced KC gene transcription in mouse macrophages.",

J. Immunol. 155.3593-3600(1995)

-!- FUNCTION: Has chemotactic activity for neutrophils. Contributes to neutrophil activation during inflammation (By similarity).

-!- SUBCELIULAR LOCATION: Screted.

-!- INDUCTION: By platelet-derived growth factor. In lung, by lipopolysaccharide or inflammation (By similarity).

-!- SUMIJARITY: Belongs to the intercrine alpha (chemokine CKC)
                                                          POTENTIAL.
GROWTH REGILATED PROTEIN HOMOLOG ALPHA.
BY SIMILARITY.
1002CACG64DB1F76 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-0CT-1989 (Rel. 12, Created)
01-0CT-1989 (Rel. 12, Last sequence update)
01-0CT-2003 (Rel. 42, Last annotation update)
Growth regulated protein precursor (CXCLI) (Platelet-derived growth factor-inducible protein KC) (Secretory protein N51).
CXCLI OR SCYBI OR GROI OR GRO OR MGSA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Bozic C.R., Kolakowski L.F. Jr., von Uexkull C., Garcia-Rodriguez
Conklyn M.J., Breslow R., Showell H.J., Gerard N.P., Gerard C.;
Submitted (FEB-1995) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi, Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Musinae, Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
MEDLINE-89078502; PubMed-2909392;
Ryseck R.P., Macdonald-Bravo H., Mattei M.-G., Bravo R.;
"Cloning and sequence of a secretory protein induced by growth
                                                                                                                                                                                                                                                 h. Similarity 30.5%; Pred. No. 1.7e-05; 29; Conservative 18; Mismatches 37; Indels 11;
PROSITE; PS00471; SMALL CYTOKINES CXC; 1.
Cytokine; Growth factor; Inflammatory response; Signal.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               62 HCEEKMVIITTKSVSRYRGQEHCLHPKLQSTKRFI 96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     96 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             factors in mouse fibroblasts."; 
Exp. Cell Res. 180:266-275(1989).
                                                                    1 30 PO
31 104 GR
42 66 BY
104 AA; 10984 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE OF 1-10 FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (Mouse)
                                                                                                                                                                                                                                                                                      Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NCBI TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GRO MOUSE
                                                                                                                                                          DISULFID
SEQUENCE
                                                                                                                               DISULFID
                                                                                                                                                                                                                                                       Query Match
                                                                 SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 15

GROUSE

GROUSE

DT 01-07

DT 01-07

DT 01-07

DT 01-07

DE factor

GROUSE

RR REP

SOFFFF
                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
```

```
the Buropean Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3 PATRSLLCAALLLLATSRLATGAPIANELRCQCLQTWAGIHLKNIQSLKVUPSGPHCTQT 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              10 PVSMRILAAALILLL---LALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKYPHCEEK 66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    18.9%; Score 111; DB 1; Length 96; 30.8%; Pred. No. 3e-05;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              37; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              InterFro; 1rnvoirs; 1. Pfans, 1. Propose; 118; 1. PRINTS; PRO0437; SMALLCYTKCKC.
SMART; SMO0199; SCY; 1. PROSITE; PRO0471; SMALL, CYTOKINES CXC; 1. Cytokine; Growth factor; InflammaFory response; Signal.
Cytokine; Growth factor; InflammaFory response; Signal.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GROWTH REGULATED PROTEIN. BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4A52B5E5C38B45C2 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         18; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              67 MVIITTKSVSRYRGQEHCLHPKLQSTKRFIK 97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         63 EVIATLKN ----GREACLDPEAPLVQKIVQ 88
                                                                                                                                                                                                                                                      EMBL, J04596; AAA40131.1; -.
EMBL, U20624; AAB03376.1; -.
EMBL, U20527; AAB03376.1; -.
EMBL, S79767; -, NOT_ANNOTATED_CDS.
PIR; A32954; A32954.
MSP, P18975; LORN.
MSD, MI1.108068; CXCll.
InterPro; IPR001811; Chemokine_IL8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Search completed: April 22, 2004, 12:32:53 Job time : 18 secs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   96 AA; 10254 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
wes 28; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DISULFID
DISULFID
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
              SOUTH THE REAL PRINCE OF THE P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
```

GenCore version 5.1.6 Copyright (c) 1993 - 2004 Compugen Ltd.

OM protein - protein search, using sw model

Run on:

April 22, 2004, 12:30:18 ; Search time 21 Seconds (without alignments) 508.441 Million cell updates/sec

US-09-978-189-370 587 Title: Perfect score: Sequence:

1 MSLLPRRAPPVSMRLLAAAL......TKRFIKWYNAWNEKRRVYEE 111 Scoring table: BLOSUM62 Gapop 10.0 , Gapext 0.5

283366 seqs, 96191526 residues Searched:

Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database :

PIR 78:\*
1: pir1:\*
2: pir2:\*
3: pir3:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

STIMMARTES

1		* <u>ç</u>	5		SUMMARIES	
No.	Score	Match	y h Length	DB	ID	Description
-	520	۳		7	JG0182	chemokine BRAK - h
N	143.5	24.4		7	S46198	cytokine-induced n
m	138	m	5 100	~	JH0200	
4	131	N		~	B28414	7
S	128.5	21.9		C)	JH0281	
9	124	21.1		(1	S21467	
7	124	7		N	I55614	
œ	н	70		7	A28414	2
σι	116.5	19		~	B38290	GRO-gamma precurso
10	111	18		(7)	A32954	
11	103	17		~	B44253	alveolar macrophag
12	97	16		N	JN0572	•~
13	94.5	16		۲۲	A35766	platelet factor 4,
14	89	15		N	JC7800	ij
15	87.5	14		~	0700470	interferon gamma-i
16	85.5	14		C/I	151886	macrophage inflamm
17	84	14.		Н	PFHU4A	platelet factor 4
18	82.5	•	1 103	N	A53096	interleukin-8 prec
13	82.5	14.		М	TGHU	beta-thromboglobul
	-1			7	JN0841	interleukin-8 - do
	81	13.8		Н	PFHU4	platelet factor 4
	0	13.		Ŋ	I64831	gene KC protein -
23	80.5	13.		N	A45492	IP-10 precursor -
	0	13.		~1	A26736	transformation-ind
	0	٠	7 103	N	I50417	RSV-induced protei
	80	•		7	S42881	platelet basic pro
	٩.			н	GHTG	interferon gamma-i
78	79.5	13.5	5 101	~	4249	н
	ů.			N	A55010	neutrophil-activat

32 2 A57325 757 2 T27127 75 2 T27127 75 2 A54188 75 2 A56774 701 2 146871 70 2 B5671 86 2 H8869 99 2 A37034 86 2 T28869 70 1 151987 70 1 151987 70 1 151987 70 2 T25246 70 1 151987 70 2 T25246	11 79 75 75 75 75 75 75 75 75 75 75 75 75 75	C.X-C chemokine LI hypothetical prote	hypothetical prote granulocyte chemot	platelet factor 4 interleukin-8 - ra	granulocyte chemot interleukin-8 prec	protein unc-31 [im hypothetical prote	carbamate kinase ( Mob-1 - rat	replication licens hypothetical prote	hypothetical prote flagella accessory
47.47.00.00.00.00.00.00.00.00.00.00.00.00.00	•	AS7325 T27127	T32670 A54188	A26774 146871	B54188 A37034	H88869 T28087	S76941 159277	151685 T25246	\$76393 C84251
	•	32 27	94 2 75 2	05 2	99 2	2 2 2 2	98 2	49 2	81 2
		76	73.5	73	71.5	71	9	9.00	60 60 60 60
7	668 688 688 688 688 688 688 688	30 31	2 E	3.44 3.54	36	3 8 9 6	4 4 0 4	4 4 4 3	4 4 5 5

## ALIGNMENTS

RESULT 1   1909   190
--

õ

Systing cytokine-induced neutrophil chemoattractant 2 - rat cytokine-induced neutrophil chemoattractant 2 - rat cytokine-induced neutrophil chemoattractant 2 - rat cyberies: Rattus norvegicus (Norway rat) Cybecies: Rattus norvegicus (Norway rat) Cybecies: 20-reb-1995 #text\_change 20-Jun-2000 CyAccession: S46198; C48988 R;Nakagawa, H; Komorita, N.; Shibata, F; Ikesue, A.; Konishi, K.; Fujioka, M.; Kato, H. Biochem J. 301, 545-550, 1994 A;Title: Identification of cytokine-induced neutrophil chemoattractants (CINC), rat GRO/(Ayritle: Identification of cytokine-induced neutrophil chemoattractants (CINC), rat GRO/(Ayritle: Identification of cytokine-induced neutrophil chemoattractants (CINC), rat GRO/(Ayritle: Preliminary A;Molecule type: mRNM. A)Residues: 1-100 cNNA. A)Residues: 1-100 cNNA. A; Hatakeyama, S.; Kato, H.; Gotoda, T.; Komorita, N.; Watanabe, R;Nakagawa, H.; Ikesue, A.; Hatakeyama, S.; Kato, H.; Gotoda, T.; Komorita, N.; Watanabe, B;Ochem. Pharmacol. 45, 1425-1430, 1993 A;Title: Production of an interleukin-8-like chemokine by cytokine-stimulated rat NRK-491 A;Reference number: A48988; MUID:93228656; PMID:8471066 A;Accession: C48988 A;Status: preliminary

21; Mismatches

```
10 PVSMRLLAAALLLLLLLLLALYTARV-----DGSKCKCSRKGPKIRXSDVKKLEMKPKYPH 62
          C;Superfamily: beta-thromboglobulin
F;1-23/Domain: signal sequence #status predicted <SIG>
F;24-101/Product: growth-regulated protein #status predicted <MAT>
                                                                                                                                                                                                    22.3%; Score 131; DB 2; Length 101; 31.6%; Pred. No. 1.5e-06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          63 CEEKMVIITTKSVSRYRGQEHCLHPKLQSTKRFIK 97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       63 CIQTEVIATLKN-----GQEACLNPEAPMVQKIVQ 92
                                                                                                                                                                                                                                                                                               30, Conservative
                                                                                                                                                                                                                                                 Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Residues: 1-107 <TEK>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A; Molecule type: mRNA
A; Residues: 1-107 <HAS>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A; Molecule type: mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Accession: A60407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Accession: A38290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Accession: JH0281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Accession: A35931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A; Molecule type:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local S
                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Druzzon macrophage inflammatory protein 2 precursor - mouse (5) Species: Mus musculus (house mouse)
C;Species: Musculus (house mouse)
C;Species: Musculus (house mouse)
C;Accession: JH0200, A22190
S;Tekamp-Olson, P: Gallegos, C: Bauer, D: McClain, J:; Sherry, B:; Fabre, M.; van Dev
J: Exp Med. 172, 911-919, 1990
A;Title: Cloning and characterization of cDNAs for murine macrophage inflammatory protein
A;Reference number: JH0200, MUID:90354792; PMID:2201751
A;Reducule type: MRNA
A;Cross-references: GB:X53798; MID:953128; PIDN:CAA37807.1; PID:953129
B;Wolpe, S.D.; Sherry, B.; Juers, D.; Davatelis, G.; Yurt, R.W.; Cerami, A.
A;Cross-references: GB:X53798; MID:89098980; PMID:2641119
A;Reference number: A32190; MUID:89098980; PMID:2641119
A;Residues: 28-59 - MOLD
C;Supperfamily: beta-thromboglobulin
C;Reywords: heparin binding
F;1-77/Domain: signal sequence #status predicted <8IG>F;28-100/Product: macrophage inflammatory protein 2 #status experimental <MAT>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               proveh.-regulated protein precursor - Chinese hamster
Grobeies: Cricetulus griseus (Chinese hamster)
Grobeies: Cricetulus griseus (Chinese hamster)
Grobeies: Oricetulus (Chinese hamster)
Arcesion: B2844
Arceseion: B2844
Arceseion: B28444
Arceseion: B28444
Arceseion: B28444
Arceseious: D101 < Anx
Arceseious: Chinese hamster
Arceseious: Chinese hamster
Arceseious: Chinese hamster
Arceseious: Chinese hamster
Arceseious Grobeies: Chinese hamster
Arceseious Grobeies: Chinese hamster
Arceseious chinese hamste
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8 APPVSMRLLAAALLLLLLALYTARVDGS-----KCKCSRKGPKIRYSDVKKLEMKPKY 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2 APP-TRRILINAALILILILIMATSHQPSGTVVARELRCQCLKTLPRVDFENIQSLTVTPPG 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8 APPVSMRLLAAALLLLLLLLLLTATARVDGS-----KCKCSRKGPKIRYSDVKKLEMKPKYP 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2 APP-TCRLLSAALVILLLLATNHQATGAVVASELRCQCLKTLPRVDFKNIOSLSVTPPGP 60
                                                                                                                                                                                                                                                                                                                                                                                     31; Indels 13; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 23.5%; Score 138; DB 2; Length 100;
Best Local Similarity 33.3%; Pred. No. 2.9e-07;
Matches 32; Conservative 21; Mismatches 31; Indels 12; Gaps
                                                                                                                                                                                                                                                                      vuery Match
24.4%; Score 143.5; DB 2; Length 100;
Best Local Similarity 35.1%; Pred. No. 7.6e-08;
Matches 34; Conservative 19; Mismatches 31; Indels 13:
A;Molecule type: protein
A;Mesidues: 33-56 < NA2>
A;Eresidues: 33-56 < NA2>
A;Experimental source: kidney, NRK-49F fibroblasts
A;Notes: sequence extracted from NCBI backbone (NCBIP:129130)
C;Superfamily: beta-thromboglobulin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61 PHCEENWVIITTKSVSRYRGQEHCLHPKLQSTKRFIK 97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61 PHCTQTEVIATIKD -----GOEVCLNPQAPRLOKILQ 92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          62 HCEEKMVIITTKSVSRYRGQEHCLHPKLQSTKRFIK 97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61 HCAQTEVIATLKG-----GOKVCLDPEAPLVQKIIQ 91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           qq
```

```
macrophage inflammatory protein 2 alpha precursor - human NyAlternate names: gro-beta; growth regulated protein beta; melanoma growth-stimulatory; s. Species; Homo sapiens (man) (p. Species; Homo sapiens (man) 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A,Gross-references: GB:X53799, NID:g34658, PIDN:CAA37808.1, PID:g34659
R,1ida, N.; Grotendorst. G.R.
Nol. Cell. Blol. 10, 5586-5599, 1990
A;Title: Cloning and sequencing of a new gro transcript from activated human monocytes: 6
A;Reference number: A35931; MUID:90377259; PMID:2078213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           R;Haskill, S.; Peace, A.; Morris, J.; Sporn, S.A.; Anisowicz, A.; Lee, S.W.; Smith, T.; N. Proc. Neul. Acad. Sci. U.S.A. 87, 7732-7736, 1990
A;Title: Identification of three related human GRO genes encoding cytokine functions. A;Reference number: A38290; MUID:91017578; PMID:2217207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A,Cross-references: GB:W16820; NID:g183628; FIDN:AAA63183.1; FID:g183629
R;Sporn, S.A.; Eierman, D.F.; Johnson, C.E.; Morris, J.; Martin, G.; Ladner, M.; Haskill,
J. Immunol. 144, 4434-4441, 1990
A;Title: Woncoyte adherence results in selective induction of novel genes sharing homolog
A;Reference number: A60407; MID:90257367; PMID:2341726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A;Molecule type: mRNA
A;Residues: 1-107 <IID>
A;Cross-references: GB:M59731; GB:M36964; NID:g183626; PIDN:AAA63182.1; PID:g183627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A)Readuse: 56-107 <8PO>
C)Superfamily: beta-thromboglobulin
C;Superfamily: beta-thromboglobulin
C;Superfamily: beta-thromboglobulin
F;1-34/Domain: signal sequence #status predicted <SIG>
F;1-34/Domain: signal sequence #status protein 2 alpha #status predicted <MAT>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8 APPVSMRLLAAALLLLLLLALYTARVDGS-----KCKCSRKGPKIRYSDVKKLEMKPKYP 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8 AAPSNPRLLRVALLLLLLVAASRRAAGAPLATELRCQCLQTLQGIHLKNIQSVKVKSPGP 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21.9%; Score 128.5; DB 2; Length 107;
33.3%; Pred. No. 3e-06;
cive 18; Mismatches 35; Indels 11; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 62 HCBEKMVIITTKSVSRYRGQEHCLHPKLQSTKRFIK 97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           68 HCAQTEVIATLKN-----GOKACLNPASPMVKKIIE 98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A; Status: not compared with conceptual translation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 Similarity 33.3%, 32; Conservative
```

us-09-978-189-370.rpr

Page

```
melanoma growth-stimulatory activity precursor - human
N.Alternate names: fibroblast derived neutrophil-activating protein gamma; GRO-alpha; grc
C;Species: Homo sapiens (man)
C;Species: Homo sapiens (man)
C;Accession: 310-Jun-1989 #sequence_revision 30-Jun-1989 #text_change 20-Aug-1999
C;Accession: 813669; A28414; S00983; B60401; S03976; A47626; B46519
R;Baker, N.E.; Kucera, G.; Richmond, A.
Mucleic Acids Res. 18, 6453, 1990
A;Title: Nuclectide sequence of the human melanoma growth stimulatory activity (MGSA) ger
A;Reference number: S13669; MUID:91057157; PMID:2129556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A; Cross-references: EMBL.X54489; NID:g34625; PIDN:CAA38361.1; PID:g34626
R; Anisowicz, A.; Bardwell, L.; Sager, R.
Fr. Misowicz, A.; Bardwell, L.; Sager, R.
From Sci. Natl. Acad. Sci. US.A. 84, 7188-71987
A; Fithe: Constitutive overexpression of a growth-regulated gene in transformed Chinese his A; Feference number: A94184; MUID:88041072; PMID:2890161
A; Accession: A28414
A; Molecule type: mRNA
A; Residuae; 1-107 cAMI.
A; Residuae: 1-107 cAMI.
A; Cross-references: GB:U03561; NID:9183622; PIDN:AA35933.1; PID:g306806
R; Richmond, A.; Balentien, E.; Thomas, H.G.; Flaggs, G.; Barton, D.E.; Spiess, J.; Bordor R; Richmond, As; Balentien, E.; Thomas, H.G.; Flaggs, G.; Barton, D.E.; Spiess, J.; Bordor R; Richmond, As; Recidence and chromosomal mapping of melanoma growth stimulator A; Reference number: S00983; MUID:89328991; PMID:2970963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A, Accession: S00983
A, Modecule type: mRNA
A, Residues: 1-107 <RIC>
A, CTOSS-TEFENCES: EMBLX, X12510; NID: 934621, PIDN: CAA31027.1, PID: 934622
A, CTOSS-TEFENCES: EMBLX, X1210; NID: 94621, PIDN: CAA31027.1, PID: 934622
J. Immunol. 144, 2223-2222, 1990
A, Title: IL-lalpha or tumor necrosis factor-alpha stimulate release of three NAP-1/IL-8-1
A, Reference number: A60401; MUID: 90187866; PMID: 2179408
A, Accession: B60401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Molecule type: protein
A; Residues: 35-42, X', 44, XX, 46-48 <SCH>
A; Residues: 35-42, XY, 44, XY, 46-48 <SCH>
A; Experimental source: dermal fibroblasts
R; Golds, E.E.; Mason, P.; Nyirkos, P.
B; Golds, E.E.; Mason, P.; Nyirkos, P.
A; Title: Inflammatory cytokines induce synthesis and secretion of gro protein and a neutral synchesis and secretion of gro protein and a neutral synchesis and secretion of gro protein and a neutral synchesis synthesis and secretion of gro protein and a neutral synchesis synthesis synthesis synthesis synthesis synthesis and secretion of gro protein and a neutral synthesis synthe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A,Molecule type: protein A,Molecule type: protein c.8C2>
A,Residues: 35-63, X',65 c.8C2>
A,Residues: 35-63, X',65 c.8C2>
A,Experimental source: LPS-stimulated monocytes
R;Proost, P.; De Wolf-Peeters, C.; Conings, R.; Opdenakker, G.; Billiau, A.; Van Damme, c. Timmunol, 150, 1000-1010, 193
A,Tittle: Identification of a novel granulocyte chemotactic protein (GCP-2) from human tun A,Reference number: A46519; MUID:93139489; PMID:8423327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A; Molecule type: protein
A; Residues: 35-41, X', 43-49, X', 51-52, XX', 55-57 <GOL>
A; Residues: 35-41, X', 43-49, X', 51-52, XX', 55-57 <GOL>
B; Schoder, J.M.; Persoon, N.L.M.; Christophers, E.
J. Exp. Med. 171, 1091-11.00, 1990
A; Title: Lipopolysaccharide-stimulated human monocytes secrete, apart from neutrophil-act A; Title: Lipopolysaccharide-stimulatory activity.
A; Reference number: A47626; MUD: 90217938; PMID: 2182761
A; Accession: A47626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A;Cross-references: GDB:120181; OMIM:155730
A;Map position: 4q21-4q21
S;Superfemally: beta-thromboglobulin
F;1-34/Domain: signal sequence #status predicted <SIG>
F;35-107/Product: melanoma growth-stimulatory activity #status experimental <MAT>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
20.0%; Score 117.5; DB 2; Length 107;
Best Local Similarity 32.3%; Pred. No. 4.2e-05;
Matches 31; Conservative 17; Mismatches 37; Indels 11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Molecule type: protein
A;Residues: 35-62 <PRO>
A;Experimental source: MG-63 osteosarcoma cells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-107 <BAK>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Accession: B46519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A; Gene: GDB: GRO1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      macrophage inflammatory protein-2 - rat

C.Species: Rattus sp. (rat)

C.Species: Rattus sp. (rat)

C.Species: Advance_revision 26-Jul-1996 #text_change 20-Aug-1999

C.Species: Solul-1996 #sequence_revision 26-Jul-1996 #text_change 20-Aug-1999

C.Species: Note: Sp. 1009-1017, 1995

M. Clin. Invest. 95, 1009-1017, 1995

A.Reference number: 155614

A.Reference number: 155614

A.Reference number: 155614

A.Residus: preliminary; translated from GB/EWBL/DDBJ

A.Molecule type: mRNA

A.Residus: 1100 cRES

A.Residus: 1100 cRES

A.Corss-references: GB:877604; NID:9998406; PIDN:AAB33749.1; PID:9998407

C.Superfamily: beta-thromboglobulin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Cross-references: EMBL:X65647; NID:g56665; PIDN:CAA46599.1; PID:g56666
R;Nakagawa, H.; Ikesue, A.; Hatakeyama, S.; Kato, H.; Gotoda, T.; Komorita, N.; Watanabe Biochem. Pharmacol. 45; 1425-1430; 1993
A;Title: Production of an interleukin-8-like chemokine by cytokine-stimulated rat NRK-49 A;Reference number: A48988; MUID:93228656; PMID:8471066
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2 APPTRQLINAVLVLLLLLATNHQGTGVVVASELRCQCLTTLPRVDFKNIQSLTVTPPGPH 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8 APPVSMRLLAAALLLLLLLLLALY---TARVDGS--KCKCSRKGPKIRYSDVKKLEMKPKYPH 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2 APPTROLLNAVLVLLLILATNHQGTGVVVAŠELRCQCLTTLPRVDFKNIQSLTVTPPGPH 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8 APPVSMRLLAAALLILLLALY.--TARVDGS--KCKCSRKGPKIRYSDVKKLEMKPKYPH 62
                                                                                                                                                                                                                                                                Alternate names: chemoattractant P-1
Species: Rattus norvegicus (Norvay rat)
Abet: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change 20-Aug-1999
Accession: S21467; D48988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21.1%; Score 124; DB 2; Length 100;
ilarity 33.7%; Pred. No. 8.2e-06;
Conservative 16; Mismatches 37; Indels 10; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           10; Gaps
```

21.1%; Score 124; DB 2; Length 100; 33.7%; Pred. No. 8.2e-06; 16; Mismatches 37; Indels

32; Conservative

g

ઠે

ద

à

Local Similarity

Query Match Matches

g ò 엄 RESULT 8 A28414

Local Similarity les 32; Conserv

Query Match

A,Accession: D48988
A;Status: preliminary
A;Molecule type: protein
A;Residues: 32-45 <NAK>
A;Residues: 32-45 <NAK>
A;Residues: 32-45 <NAK>
A;Residues: 32-45 <NAK>
A;Reperimental source: kidney, NRK-49F fibroblasts
A;Nore: sequence extracted from NCBI backbone (NCBIP:129129)
C;Superfamily: beta-chromboglobulin

submitted to the EMBL Data Library, April 1992 A, Reference number: S21467 A, Accession: S21467

A;Status: preliminary A;Molecule type: mRNA A;Residues: 1-100 <DRI>

macrophage inflammatory protein 2 - rat N;Alternate names: chemoattractant D-1

```
A; Molecule type: mRNA
A; Residues: 1-96 < RYS>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Accession: B44253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      C, Genetics:
A; Map position:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 12
JN0572
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A22954

A22954

A22954

A22954

A22954

A22954

A22054

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GSGSGSON ACCOGNATION THOUSEN THE STORT THE STO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Molecule type: mRNA
A;Residues: 1-24, G', 29-107 <HAS>
A;Cross-references: GB:NJ6821; NID:g183632; FIDN:AAA63184.1; FID:g183633
A;Cross-references: GB:NJ6821; NID:g183632; FIDN:AAA63184.1; FID:g183633
B;Proost, P.; De Wolf-Peeters, C.; Conings, R.; Opdenakker, G.; Billiau, A.; Van Damme, J. Immunol. 150, 1000-1010, 1993
A;Tile: Identification of a novel granulocyte chemotactic protein (GCP-2) from human tu
A;Tile: Identification of a novel granulocyte chemotactic protein (GCP-2) from human tu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 R;Haskill, S.; Peace, A.; Morris, J.; Sporn, S.A.; Anisowicz, A.; Lee, S.W.; Smith, T.; Proc. Natl. Acad. Sci. U.S.A. 87, 7732-7736, 1990
A;Title: Identification of three related human GRO genes encoding cytokine functions.
A;Reference number: A38290; MUID:91017578; PMID:2217207
8 APPVSMRLLAAALLLLLLLALYTARVDGS-----KCKCSRKGPKIRYSDVKKLEMKPKYP 61
                                                                                  8 AAPSNPRLLRVALLLILLLVAAGRRAAGASVATELRCQCLQTLQGIHPKNIQSVNVKSPGP 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8 APPVSMRLLAAALLLLLLLLLLTATYTARVDGS-----KCKCSRKGPKIRYSDVKKLEMKPKYP 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels 11; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A;Molecule type: mRNA
A;Residues: 1-107 <TEK>
A;Cross-references: GB:X53800; NID:g34662; PIDN:CAA37809.1; PID:g34663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 2; Length 107;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A,Map position: 4q21
C;Superfamily: beta-thromboglobulin
F;1-34/Domain: signal sequence #status predicted <SIG>F;35-107/Product: GRO-gamma #status experimental <MAT>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    19.8%; Score 116.5; DB 2; 30.2%; Pred. No. 5.3e-05; tive 20; Mismatches 36;
                                                                                                                                                                                                                                                62 HCEEKMVIITTKSVSRYRGQEHCLHPKLQSTKRFIK 97
                                                                                                                                                                                                                                                                                                                                                               68 HCAQTEVIATLKN----GRKACLNPASPIVKKIIE 98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          62 HCEEKMVIITTKSVSRYRGQEHCLHPKLQSTKRFIK 97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  68 HCAQTEVIATLKN----GKKACLNPASPMVQKIIE 98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Molecule type: protein
A;Residues: 35-52 <PRO>
A;Experimental source: MG-63 osteosarcoma cells
C;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 Similarity 30.29
29; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Accession: B38290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Accession: JH0282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A; Accession: C46519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                g
                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
```

```
A/Cross-references: GB.J04596; NID:g201042; PIDN:AAA40131.1; PID:g201043
R;Ryseck, R.P.; MacDonald-Bravo, H.; Mattei, M.G.; Bravo, R.
Exp. Cell Res. 180, 266-275, 1989
A/Title: Cloning and sequence of a secretory protein induced by growth factors in mouse f A/Reference number: JH0081; MJID:89079502; PMID:2909392
A;Accession: JH0081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              C)Accession: E44253
R;Goodman, R.B.; Foster, D.C.; Mathewes, S.L.; Osborn, S.G.; Kuijper, J.L.; Forstrom, J.V
Biochemistry 31, 10483-10490, 1992
A;Title: Molecular cloning of porcine alveolar macrophage-derived neutrophil chemotactic A;Reference number: A44253; MUID:93041741; PMID:1420165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            neutrophil chemo-attractant Gro protein precursor - rat
N'Alternate names: CINC; cytokine-induced neutrophil chemoattractant; interleukin-8-like
C;Species: Rattus norvegicus (Norway rat)
C;Date: 30-Sep-1993 #sequence revision 30-Sep-1993 #text change 20-Jun-2000
C;Accession: JN0572; JQ1519; M34481; A48988; B48988; S51214
Gene 126, Z85-286, 1993
A;Title: Structure of the gene encoding rat neutrophil chemo-attractant Gro.
A;Reference number: JN0572; MUID:93246259; PMID:8482545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      alveolar macrophage chemotactic factor-II (AMCF-II) intercrine-alpha protein - pig
C;Species: Sus scrofa domestica (domestic pig)
C;Date: 30-Apr-1993 #sequence_revision 18-Nov-1994 #text_change 20-Aug-1999
                                                                                                                                                                                                                                                                                                                                                       A, Residues: 1-96 <RYS>
C, Comment: This protein is basic and lacks threonine, phenylalanine, and tyrosine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       10 PVSMRLLAAALLLLLL---LALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKYPHCEEK 66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 MSLLPRRAP--PVSMRLLAAALLLLLL------ALYTARVDGSKCKCSRKGPK 45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 MRLLTSRATRVPSPSGLLCAVLAMLLLTPSGPLASASPIEAAEAAVVRELRCMCLTTTPG 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A;Cross-references: GB:M99368; NID:g164325; PIDN:AAA30991.1; PID:g164326
A;Experimental source: alveolar macrophage
A;Note: sequence extracted from NCBI backbone (NCBIN:117417, NCBIP:117418)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61 IHPKMISDLOVIPAGPOCSKABVIATLKN-----GKEVCLDPKAPLIKKIVQ 107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     46 IRYSDVKKLEMKPKYPHCEEKMVIITTKSVSRYRGQEHCLHPKLQSTKRFIK 97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Match 117; Score 103; DB 2; Length 117; Local Similarity 31.2%; Pred. No. 0.0015; es 35; Conservative 11; Mismatches 46; Indels 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ouery Match 18.9%; Score 111; DB 2; Length 96; Best Local Similarity 30.8%; Pred. No. 0.00018; Matches 28; Conservative 18; Mismatches 37; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A;Map position: 5
C;Superfamily: beta-thromboglobulin
C;Keywords: extracellular protein
F:1-24/Domain: signal sequence #status predicted <SIG>F;25-96/Product: gro-alpha #status predicted <MAT>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               67 MVIITTKSVSRYRGQEHCLHPKLQSTKRFIK 97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       63 EVIATLKN----GREACLDPEAPLVOKIVQ 88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             C; Superfamily: beta-thromboglobulin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Molecule type: mRNA; protein
A;Residues: 1-117 <GOO>
```

Ħ

```
C;Date: 02-Apr-2002 #sequence_revision 02-Apr-2002 #text_change 02-Apr-2002 C;Accession: UC7800 R;0da, M.; Haruta, H.; Nagao, M.; Nagata, Y. Biochem. Biophys. Res. Commun. 290, 865-868, 2002 A;Title: Isolation and characterization of mouse homolog of the neutrophil activating per A;Reference number: UC7800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Cross-references: DDBJ:AB042817
C;Comment: This protein is highly basic, and is specifically induced by thrombopoietin
ifferentiation/maturation events.
                                                                                                   gamma-interferon encodes a member of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A;Cross-references: GB:X72755; GB:S60728; NID:g311375; PIDN:CAA51284.1; PID:g311376
C;Superfamily: beta-thromboglobulin
C;Keywords: cytokine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16 LAAALLLLLLALY-----TARVDGSKCKC-SRKGPKIRYSDVKKLEMKPKYPHCEEK 66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     15 LLAAALLLLLLALYTA-RVDGS-----KCKCSRKGPKIRYSDVKKLEMKPKYPHCEEKM 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              23 LILIGLIIVALAPITAGKSDGMDPYIELRCRCTNTISGIPFNSISLVNVYRPGVHCADVE 82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       interferon gamma-induced protein HuMIG - human
C;Species: Homo sapiens (man)
C;Date: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change 28-May-1999
C;Accession: UN0470
R;Parber, J.M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           : : | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | : | | : | : | | : | : | | : | : | | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                          A,Molecule type: mRNÁ
*Residues: 1-126 «FRA»
A;Cross-references: GB:M34815; NID:g199692; PIDN:AAA39706.1; PID:g199693
C;Superfamily: beta-thromboglobulin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  R;Farber, J.M.
Biochem. Biophys. Res. Commun. 192, 223-230, 1993
A;Title: HuMig: a new human member of the chemokine family of cytokines A;Reference number. JN0470; MUID:93236577; PMID:8476424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 25.5%; Pred. No. 0.012;
Matches 26; Conservative 21; Mismatches 40; Indels 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              15.2%; Score 89; DB 2; Length 113; 29.2%; Pred. No. 0.041;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    67 MVIITTKSVSRYRGQEHCLHPKLQSTKRFIK-WYNAWNEKRR 107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61 EIIATLKN-----GDQTCLDPDSANVKKLMKEWEKKINQKKK
               R;Farber, J.M.
Proc. Natl. Acad. Sci. U.S.A. 87, 5238-5242, 1990
A;Title: A macrophage mRNA selectively induced by gamma.
A;Faference number: A35766; MUD:90319087; PMID:2115167
A;Accession: A35766
A;Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              neutrophil activating peptide-2 precursor - mouse C; Species: Mus musculus (house mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       15; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                83 VIATLKN-----GÓKTCLDPNAPGVKRIV 106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 68 VIITTKSVSRYRGOEHCLHPKLQSTKRFI 96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            26; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A;Contents: Megakaryocyte
A;Accession: JC7800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
Matches 26; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A; Molecule type: mRNA
A; Residues: 1-125 <FAR>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A; Molecule type: mRNA
A; Residues: 1-113 <ODA>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Accession: JN0470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                C,Genetics:
A,Gene: nap-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A) Accession: A48988
A) Status: preliminary
A) Molecule type: protein
A) Residues: 25-57 < NAK>
A) Essidues: 25-57 < NAZ>
A) Accession: B4898
A) Status: preliminary
A) Molecule type: protein
A) Residues: 25-57 < NAZ>
A) Essidues: 25-74 < NAZ
A) Note: sequence extracted from NCBI backbone (NCBIF:129131)
B) RHanzawa, H: Maranabe, K: Tsurufuji, S.
A) Note: sequence extracted from NCBI backbone (NCBIF:129131)
B) RHAnzawa, H: Maranabe, K: Tsurufuji, S.
BEBS Lett. 354, 207-212, 1994
A) Title: The three dimensional structure of rat cytokine CINC/Gro in solution by homonuc A) Residues: 25-104
A) Rocession: S1214
A) Molecule type: protein
A) Residues: 25-96
A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; Residues: 25-96 <WAT>
A; Residues: 25-96 <WAT>
R; Nakagawa, H.; Ikesue, A.; Hatakeyama, S.; Kato, H.; Gotoda, T.; Komorita, N.; Watanabe Biochem. Pharmacol. 45, 1425-1430, 1993
A; Title: Production of an interleukin-8-like chemokine by cytokine-stimulated rat NRK-49
A; Reference number: A48988; MUID:93228656; PMID:8471066
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 line
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         46
A;Accession: JN0572
A;Molecule type: DNA
A;Residues: 1-96 kKONA
A;Cessidues: 1-96 kKONA
CTCOSE-REferences: DDBJ:D11445; NID:g391854; PIDN:BAA02009.1; PID:g220755
R;Huang, S.; Paulauskis, J.D.; Kobzik, L.
Biochem. Biophys. Res. Commun. 184, 922-929, 1992
A;Title: Rat KC cDNA cloning and mRNA expression in lung macrophages and fibroblasts.
A;Reference number: JQ1519; MUID:92246987; PMID:1374243
A;Accession: JQ1519.
                                                                                                                                                                                                                                                                                                                                                                                                                                                             A, Molecule type: mRNA
A, Residues: 1-32, 'S' 34-96 < HUA>
A, Cross-references: 08:M86536
A, Experimental source: alveolar macrophage
A, Experimental source: alveolar macrophage
A, Note: the authors translated the codon AGT for residue 33 as Cys, AAC for residue
R, Matanabe, K.; Konishi, K.; Fulioka, M.; Kinoshita, S.; Nakagawa, H.
J. Biol. Chem. 264, 19559-19563, 100
A, Title: The neutrophil chemoattractant produced by the rat kidney epithelioid cell
A, Reference number: A34481; MUID:90062049; PMID:2684956
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ajintrons: 24/1; 65/2; 92/2
C;Superfamily: beta-thromboglobulin
C;Reywords: cytokine; disulfide both
P;1.24/Domain: signal sequence #status predicted <SIG>
F;25-96/Product: neutrophil chemo-attractant Gro protein #status experimental <CYT>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ñ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                15 LLAAALLLILLIALYTAR-----VDGSKCKCSRKGPKIRYSDVKKLEMKPKYPHCEEKM 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   platelet factor 4, interferon gamma-induced, precursor - mouse
C;Species: Mus musculus (house mouse)
C;Date: 05-Oct-1990 #sequence_revision 05-Oct-1990 #text_change 20-Aug-1999
C;Accession: A35766
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 96;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   29; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               16.5%; Score 97; DB 2; 27.8%; Pred. No. 0.0052;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       68 VIITTKSVSRYRGQEHCLHPKLQSTKRFIK 97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity 27.8% les 25, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A; Accession: A34481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A;Gene: gro; KC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 13
A35766
```

셤 ò

ğ

```
3,
                            7; Gaps
Query Match
Best Local Similarity 29.5%; Pred. No. 0.065;
Matches 28; Conservative 14; Mismatches 46; Indels 7
                                                      8 8
```

ò 셤 Search completed: April 22, 2004, 12:34:20 Job time : 22 secs

<sup>74</sup> SVSRYRGGEHCLHPKLQSTKRFI-KWYNAWNEKRR 107 : | : | | : | | : | 69 69 N-----GVQTCLNPDSADVKELIKKWEKQVSQKKK 98

```
Mon Apr 26 15:46:53 2004
```

April 22, 2004, 12:33:53 ; Search time 42 Seconds (without alignments) 730.684 Million cell updates/sec 1 MSLLPRRAPPVSMRLLAAAL......TKRFIKWYNAWNEKRVYEE 111 GenCore version 5.1.6 Copyright (c) 1993 - 2004 Compugen Ltd. Total number of hits satisfying chosen parameters: 1133595 segs, 276475211 residues Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries OM protein - protein search, using sw model Gapop 10.0 , Gapext 0.5 Minimum DB seg length: 0 Maximum DB seg length: 200000000 US-09-978-189-370 BLOSUM62 Title: Perfect score: Scoring table: Sequence: Searched: Run on:

Published Applications AA:\*

| cgn2 6/ptodata/1/pubpaa/USO7 PUBCOMB.pep:\*
| cgn2 6/ptodata/1/pubpaa/PCT NEW PUB.pep:\*
| cgn2 6/ptodata/1/pubpaa/USO6 NEW PUB.pep:\*
| cgn2 6/ptodata/1/pubpaa/USO6 NEW PUB.pep:\*
| cgn2 6/ptodata/1/pubpaa/USO6 NEW PUB.pep:\*
| cgn2 6/ptodata/1/pubpaa/USO8 NEW PUB.pep:\*
| cgn2 6/ptodata/1/pubpaa/USO9 NEW PUB.pep:\*
| cgn2 6/ptodata/1/pubpaa/USO0 NEW PUB.pep:\*
| cgn3 6/ptodata/1/pubpaa/USO0 NEW PUB

## SUMMARIES

	Appli	App	App	App	App	App				App					
	Ap.	370,	70,	70,	.20,	370,	370,	370,	370,	370,	370,	370,	370,	370,	370,
Description	Sequence 2	Sequence 3	Sequence 3	Seguence 3	Sequence 3	Seguence	Seguence	Sequence	Sequence	Seguence	Sequence	Sequence	Sequence	Sequence 370,	Sequence
ΩI	US-09-816-920-2	US-09-978-295A-370	US-09-978-697-370	US-09-978-192A-370	US-09-999-832A-370	US-09-978-189-370	US-09-978-608A-370	US-09-978-585A-370	US-09-978-191A-370	US-09-978-403A-370	US-09-978-564A-370	US-09-999-833A-370	US-09-981-915A-370	US-09-978-824-370	US-09-918-585A-370
DB	. 6	σ	o	σ	6	10	10	10	10	10	10	10	10	10	10
% Query Match Length DB	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111
% Query Match	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Score	587	587	587	587	587	587	587	587	587	587	587	587	587	587	587
Result No.		7	m	4	'n	9	7	Φ	σ	10	11	12	13	14	15

App	App	App	App	App	App	App	App	App	App	App	App	App	App	App	App	App	App	App	App	App	App	App	App	App	App	App	App	App	App	
370,	370,	370,	370,	370,	370,	370,	370,	370,	370,	370,	370,	370,	370,	370,	370,	370,	370,	370,	370,	370,	370,	370,	370,	370,	370,	370,	370,	370,	370,	
Seguence	Seguence	Sequence	Sequence	Sequence	Sequence	Seguence	Seguence	Sequence	Sequence	Sequence	Sequence	Seguence	Sequence	Sequence	Sequence	Seguence	Seguence	Sequence	Seguence	Seguence	Sequence	Sequence	Seguence	Sequence	Sequence	ednence	equence		ednence	
39-978-423A-37	9-978-	39-999-830A-37	09-978-757A-3	39-978-187B-3	39-978-643A-3	-978-375A-3	19-978-298A-3	19-978-188A-3	09-978-681A-3	-09-978-1	09-999-829A-3	09-978-299A-3	09-978-544A-3	978-665A-3	-09-978-802A-3	10-164-749A-3	-09-999-831A~3	-10-013-917A-3	-09-999-834A-3	-10-162-521A-3	-10-145-(	-10-145-088A-37	-10-145-092A-37	-10-145-129A-37	5-038A-37	-10-165-3	-10-167-600-37	10-170-	-10-172-039A-37	
2	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	12	12	12	12	12	12	12	12	12	12	12	12	12	12	
ы	111	ч	н	$\leftarrow$	н	н	Н	Н	н	н	н	1	Н	н	~		н	н	-	$\overline{}$	111	111	111	111	111	111	111	111	111	
100.0	100.0	100.0	_	-						100.0	-	1.00.0									-				-	100.0	_			
587	587	587	587	587	587	587	587	587	587	587	587	587	587	587	587	587	587	587	587	587	587	587	587	587	587	587	587	587	587	
16	17	18	19	20	21	22	23	24	25	26	27	28	53	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	

## ALIGNMENTS

Database :

```
RESULT 1

US-09-846-920-2

US-09-846-920-2

Sequence 2, Application US/09816920

Patent No. USZ020219118A1

SEQUENCE 2, Application US/09816920

Patent No. USZ020219118A1

APPLICANT: Goddard, Audrey

APPLICANT: Hold, Kenneth J.

APPLICANT: Mood, William I.

TITLE REPRESENCE: P1192-2

CURRENT APPLICATION NUMBER: US 60/064,249

PRIOR PLIANG DATE: 1998-04-27

CURRENT PILING DATE: 1998-04-27

PRIOR PLIANG DATE: 2000-03-08

PRIOR PLIANG DATE: 2000-03-08

PRIOR PLIANG DATE: 2000-03-18

PRIOR PLIANG DATE: 2000-03-18

PRIOR PLIANG DATE: 2000-03-18

PRIOR PLIANG DATE: 2000-03-08

PRIOR APPLICATION NUMBER: PCT/US00/05841

PRIOR PLIANG DATE: 2000-03-08

``

1 MSLIPPRAPPVSMRLLABAALLILILALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKY 60

원

```
NENGLY 2

SEQUENCE 270. APDICACTION (199978295A)

REALENT NO. USDOODSEGOOGAL

REALENT NO. SOURCESCOOGAL

APPLICANT REALENT DATA

APPLICANT REALENT NO. SOURCESCOOGAL

APPLICANT GOOGACK, PAUL N.

APPLICANT ROAD MATERS (00/05250

REALENT APPLICANT NAMER: (00/05250

REALENT APPLICANTON NAMER: (00/05364

PRIOR FILING DATE: 1996-03-11-13

PRIOR PILING DATE: 1996-03-11-13

PRIOR PILING DATE: 1996-03-11-13

PRIOR RELIGIOR DATE: 1996-03-11-13

PRIOR PILING DATE: 1996-03-12

PRIOR PILING DATE: 1996-03-13

PRIOR PILING DATE: 1996-03-13

PRIOR PILING DATE: 1996-03-13

PRIOR PILING DATE: 1996-03-13

PRIOR PILING DATE: 1996-
ò
```

```
PRIOR APPLICATION NUMBER: 60/07656
PRIOR PLING DATE: 1998-03-26
PRIOR PLING DATE: 1998-03-26
PRIOR PLING DATE: 1998-03-26
PRIOR PLING DATE: 1998-03-27
PRIOR PLING DATE: 1998-03-37
PRIOR PLING DATE: 1998-03-31
PRIOR PLING DATE: 1998-04-01
PRIOR PLIN
```

```
PRIOR FILING DATE: 1998-05-13
PRIOR APPLICATION NUMBER: 60/085338
PRIOR APPLICATION NUMBER: 60/085338
PRIOR APPLICATION NUMBER: 60/08523
PRIOR PELING DATE: 1998-05-13
PRIOR PRIOR OF PRIOR NUMBER: 60/08582
PRIOR PELING DATE: 1998-05-15
PRIOR PELING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/08569
PRIOR APPLICATION NUMBER: 60/08569
PRIOR APPLICATION NUMBER: 60/08559
PRIOR PELING DATE: 1998-05-15
PRIOR PELING DATE: 1998-05-15
PRIOR PLING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/08559
PRIOR PLING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/08559
PRIOR PLING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/08559
PRIOR PLING DATE: 1998-05-15
                         PRIOR APPLICATION NUMBER: 60/083392
PRIOR PILING DATE: 1998-04-29
PRIOR PILING DATE: 1998-04-30
PRIOR PILING DATE: 1998-05-05
PRIOR PILING DATE: 1998-05-07
  PRIOR APPLICATION NUMBER: 60/084627
PRIOR FILING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/084643
PRIOR FILING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/085339
PRIOR FILING DATE: 1998-05-13
FILING DATE: 1998-04-28
PRIOR
```

```
o;
  1 MSLLPRRAPPVSMRLLAAALLLLLLALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKY 60
Query Match
100.0%; Score 587; DB 9; Length 111;
Best Local Similarity 100.0%; Pred. No. 4.9e-58;
Matches 111; Conservative 0; Mismatches 0; Indels 0; Gaps
```

```
61 PHCEEKMVIITTKSVSRYRQEHCLHPKLQSTKRFIKMYNAWNEKRRVYEE 111
```

음 ठ

```
APPLICANT: Shelton, David L.
APPLICANT: Shelton, David L.
APPLICANT: Tumes, Daniel
APPLICANT: Tumes, Daniel
APPLICANT: Wood, Williams, P. Mickey
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Acide Encoding the Same
THIRD APPLICATION NUMBER: 09/91885
PRIOR PLICATION NUMBER: 60/06225
PRIOR PLICATION NUMBER: 60/06344
PRIOR FILING DATE: 1997-11-03
PRIOR FILING DATE: 1997-11-12
PRIOR FILING DATE: 1998-03-10
PRIOR FILING DATE: 1998-03-11
PRIOR PLICATION NUMBER: 60/07761
PRIOR PLICATION NUMBER: 60/07761
PRIOR PLICATION NUMBER: 60/07761
PRIOR APPLICATION NUMBER: 60/07761
PRIOR APPLICATION NUMBER: 60/07866
PRIOR APPLICATION NUMBER: 60/07891
PRIOR PLICATION NUMBER: 60/07891
61 PHCBEXMVIITTKSVSRYRGQEHCLHPKLQSTKRFIKWYNAWNEKRRVYEE 111
  Goddard, Audrey
Goddwski, Paul J.
Godowski, Paul J.
Grimaldi, J. Christopher
Gurney, Austin L.
Hillan, Kenneth J
Kljavin, Ivar J.
Kujavin, Ivar J.
Kuo, Sophia S.
   Sequence 370, Application US/09978697
Patent No. US20020169284A1
GENERAL INFORMATION:
  Pan, James;
Paoni, Nicholas F.
Roy, Margaret Ann
Shelton, David L.
Stewart, Timothy A.
  Ferrara, Napoleon
Filvaroff, Ellen
Fong, Sherman
Gao, Wei-Qiang
Gerber, Hanspeter
Gerritsen, Mary E.
   APPLICANT: Ashkenazi, Avi
APPLICANT: Baker Kevin P.
APPLICANT: Botstein, David
APPLICANT: Desnoyers, Luc
APPLICANT: Baton, Dan
  US-09-978-697-370
   APPLICANT:
APPLICANT:
APPLICANT:
```

```
REFLING DATE: 1998-04-08

REPLING DATE: 1998-04-08

REFLING DATE: 1998-04-09

REFLING DATE: 1998-04-09

REFLING DATE: 1998-04-09

REFLING DATE: 1998-04-15

REFLING DATE: 1998-04-21

REFLING DATE: 1998-04-22

REFLING DATE: 1998-04-23

REFLING DATE: 1998
DR FILING DATE: 1998-03-26

PR PELLING DATE: 1998-03-26

PR APPLICATION NUMBER: 60/079664

PR APPLICATION NUMBER: 60/079689

PR FILING DATE: 1998-03-27

PR APPLICATION NUMBER: 60/079683

PR FILING DATE: 1998-03-27

PR APPLICATION NUMBER: 60/07978

PR FILING DATE: 1998-03-27

PR APPLICATION NUMBER: 60/07928

PR FILING DATE: 1998-03-27

PR APPLICATION NUMBER: 60/07920

PR FILING DATE: 1998-03-37

PR PRILING DATE: 1998-03-30

PR FILING DATE: 1998-03-30

PR PLING DATE: 1998-03-30

PR PLING DATE: 1998-03-30

PR PLING DATE: 1998-03-30

PR PLICATION NUMBER: 60/080105
   R APPLICATION NUMBER: 60/080165
R FILING DATE: 1998-03-31
R FILING DATE: 1998-03-31
R APPLICATION NUMBER: 60/080194
R FILING DATE: 1998-04-01
R APPLICATION NUMBER: 60/080327
R FILING DATE: 1998-04-01
R APPLICATION NUMBER: 60/080338
R FILING DATE: 1998-04-01
R APPLICATION NUMBER: 60/080339
R FILING DATE: 1998-04-01
R APPLICATION NUMBER: 60/080334
R FILING DATE: 1998-04-01
R APPLICATION NUMBER: 60/080334
R FILING DATE: 1998-04-01
R APPLICATION NUMBER: 60/080304
R FILING DATE: 1998-04-01
R APPLICATION NUMBER: 60/081070
R FILING DATE: 1998-04-08
  FILING DATE: 1998-03-31
APPLICATION NUMBER: 60/080107
FILING DATE: 1998-03-31
  PRILOR PR
```

```
1 MSLLPRRAPPVSMRLLAAALLILLLALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKY 60
  1 MSLLPRRAPPVSMRLLAAALLLLLLALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKY
   0; Gaps
  61 PHCEEMWIITTKSVSRYRGQEHCLHPKLQSTKRFIKWYNAWNEKRRVYEE 111
   Query Match
Best Local Similarity 100.0%; Pred. No. 4.9e-58;
Matches 111; Conservative 0; Mismatches 0; Indels
PRIOR APPLICATION NUMBER: 60/083495
PRIOR FILING DATE: 1996-04-29
PRIOR APPLICATION NUMBER: 60/083496
PRIOR APPLICATION NUMBER: 60/083499
PRIOR PILING DATE: 1998-04-29
PRIOR PILING DATE: 1998-04-07
PRIOR PILING DATE: 1998-04-07
PRIOR PILING DATE: 1998-04-07
PRIOR PILING DATE: 1998-05-07
PRIOR PILING DATE: 1998-05-13
PRIOR PILING DATE: 1998-05-15
PRIOR PILING DATE:
   61
   g
   ð
   ö
```

ö

9

us-09-978-189-370.rapb

```
PRIOR APPLICATION NUMBER: 60/07963
PRIOR APPLICATION NUMBER: 60/079786
PRIOR APPLICATION NUMBER: 60/079786
PRIOR FILING DATE: 1998-03-27
PRIOR FILING DATE: 1998-03-27
PRIOR PRIOR DATE: 1998-03-30
PRIOR PRIOR DATE: 1998-03-30
PRIOR PRIOR DATE: 1998-03-30
PRIOR PRIOR DATE: 1998-03-31
PRIOR FILING DATE: 1998-03-31
PRIOR PRIOR DATE: 1998-04-01
PRIOR PRIOR DATE: 1998-04-05
PRIOR PRIOR DATE: 1998
             APPLICATION NUMBER: 60/079689
  APPLICANT: Wood, William I.

TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic TITLE OF INVENTION: Acids Encoding the Same File OF INVENTION: Acids Encoding the Same Title OF INVENTION: Acids Encoding the Same CURRENT APPLICATION NUMBER: US/09/978,192A

CURRENT APPLICATION NUMBER: US/09/978,192A

PRIOR PLICATION NUMBER: 2001-07-30

PRIOR PLICATION NUMBER: 60/06250

PRIOR PLICATION NUMBER: 60/06344

PRIOR PLING DATE: 1997-10-17

PRIOR PLING DATE: 1997-10-17

PRIOR PLING DATE: 1997-10-17

PRIOR PLING DATE: 1998-03-10

PRIOR PLING DATE: 1998-03-10

PRIOR PLING DATE: 1998-03-11

PRIOR PLING DATE: 1998-03-12

PRIOR PLING DATE: 1998-03-20

PRIOR PRIOR PRING DATE: 1998-03-20

PRIOR PRING DATE: 1998-03-20

PRIOR PRING DATE: 1998-03-20

PRIOR PRING DATE: 1998-03-20

PRIOR PRING DATE: 1998-03-20

PRIOR PRING DATE: 1998-03-20

PRIOR PRING DATE: 1998-03-20

PRIOR PRING DATE: 1998-03-20

PRIOR PRING DATE: 1998-03-20

PRIOR PRING DATE: 1998-03-20

PRIOR PRING DATE: 1998-03-20

PRIOR PRING DATE: 1998-03-20

PRIOR PRING DATE: 1998-03-20

PRIOR PRING DATE: 1998-03-20

PRIOR PRING DATE: 1998-03-20

PRIOR PRING DATE: 1998-03-20

PRIOR PRING DATE: 1998-03-20

PRIOR PRING DATE: 1998-03-
  Godowski, Paul J.
Grimaldi, J. Christopher
Gurney, Austin L.
Hillan, Kenneth J
Kljavin, Ivar J.
Kuo, Sophia S.
Napier, Mary A.
Pan, James;
Paoni, Nicholas F.
Roy, Margaret Ann
Shelron, David L.
Shelron, David L.
Stewart, Timothy A.
Tumas, Daniel
Williams, P. Mickey
Wood, William I.
  Sequence 370, Application US/09978192A Patent No. US2022017553A1 GENERAL INFORMATION: BAPLICANT: Ashkenazi, Avi APPLICANT: Baker Kevin P. APPLICANT: Botstein, David APPLICANT: Desnoyers, Luc
   Gao, Wei-Qiang
Gerber, Hanspeter
Gerritsen, Mary E.
Goddard, Audrey
   Ferrara, Napoleon
Filvaroff, Ellen
Fong, Sherman
   Eaton, Dan
   Fong,
RESULT 4
US-09-978-192A-370
```

us-09-978-189-370.rapb

Page

```
Goddard, Audrey
Godowski, Paul J.
Grimaldi, J. Christopher
Gurney, Austin L.
Hillan, Kenneth J
Kljavin, Ivar J.
Kuo, Sophia S.
  Paoni, Nicholas F.
Roy, Margaret Ann
Shelton, David L.
Stewart, Timothy A.
Tumas, Daniel
Williams, P. Mickey
Wood, William II.
   Ferrara, Napoleon
Filvaroff, Ellen
Fong, Sherman
Gao, Wei-Qiang
Gerber, Hanspeter
Gerritsen, Mary E.
           US20020192706A1
                         GENERAL INFORMATION:
APPLICANT: Ashkenazi, Avi
APPLICANT: Baker Kevin P.
APPLICANT: Becstein, David
APPLICANT: Desnoyers, Luc
  Pan, James;
   Eaton,
  APPLICANT:
APPLICANT:
APPLICANT:
  0; Gaps
  Query Match 100.0%; Score 587; DB 9; Length 111; Best Local Similarity 100.0%; Pred. No. 4.9e-58; Matches 111; Conservative 0; Mismatches 0; Indels
DR FILING DATE: 1998-04-29

DR APPLICATION NUMBER: 60/083499

DR PILING DATE: 1998-04-29

DR FILING DATE: 1998-04-30

DR FILING DATE: 1998-04-30

DR FILING DATE: 1998-04-30

DR FILING DATE: 1998-04-30

DR FILING DATE: 1998-05-05

DR FILING DATE: 1998-05-06

DR FILING DATE: 1998-05-07

DR APPLICATION NUMBER: 60/084637

DR FILING DATE: 1998-05-07

DR APPLICATION NUMBER: 60/084639

  R APPLICATION NUMBER: 60/084598
R APPLICATION NUMBER: 60/084598
R FILING DATE: 1998-05-07
R FILING DATE: 1998-05-13
R APPLICATION NUMBER: 60/085339
R APPLICATION NUMBER: 60/085339
   R FILING DATE: 1998-05-15
R APPLICATION NUMBER: 60/085689
F TILING DATE: 1998-05-15
R APPLICATION NUMBER: 60/085579
R FILING DATE: 1998-05-15
R APPLICATION NUMBER: 60/08580
R FILING DATE: 1998-05-15
R PAPLICATION NUMBER: 60/08581
  R FILING DATE: 1998-05-13
R APPLICATION NUMBER: 60/085323
R FILING DATE: 1998-05-13
R FILING DATE: 1998-05-15
R FILING DATE: 1998-05-15
R APPLICATION NUMBER: 60/085700
   PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION WNBER: 60/085704
PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/085697
                           PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
```

```
PREPRIORY WOOD, William I.

TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic FILE SEFERENCE: P8630PLCS CONTRINGED TO THE SEFERENCE: P8630PLCS CONTRIBUTION: Acids Encoding the Same FILE SEFERENCE: P8630PLCS CONTRIBUTION: Acids Encoding the Same PROPERTY FILING DATE: 2001-07-203 COURSEN PRIOR FILING DATE: 2001-07-204 PRIOR FILING DATE: 2001-07-204 PRIOR FILING DATE: 1997-11-13 PRIOR PLICATION NUMBER: 60/06424 PRIOR FILING DATE: 1997-11-13 PRIOR PLICATION NUMBER: 60/06331 PRIOR PRIOR PLICATION NUMBER: 60/07450 PRIOR PLICATION NUMBER: 60/07450 PRIOR PRIOR DATE: 1999-03-10 PRIOR PLICATION NUMBER: 60/07764 PRIOR FILING DATE: 1999-03-10 PRIOR PLICATION NUMBER: 60/07764 PRIOR PLICATION NUMBER: 60/07791 PRIOR PRIOR PLICATION NUMBER: 60/07996 PRIOR PLICATION NUMBER: 60/07966 PRIOR PRIOR PLICATION PL
```

9

1 MSLLPRRAPPVSMRLLAAALLLLLLALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKY 1 MSLLPRRAPPVSWRLLAAALLILILALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKY

> a ò

ð

RESULT 5 US-09-999-832A-370 ; Sequence 370, Application US/09999832A

ö

```
ANT: Baker Kevin P

ANT: Because L. Durid

ANT: Flancett Ellen

DAT: Flancett Ellen

CANT: Forge, Skerman

CANT: Godge, Canter L. Durid

CANT: Godge, Cant
```

```
PRIOR APPLICATION NUMBER: 60/01978

PRIOR FILING DATE: 1998-03-27

PRIOR APPLICATION NUMBER: 60/07920

PRIOR APPLICATION NUMBER: 60/07923

PRIOR PILING DATE: 1998-03-30

PRIOR PILING DATE: 1998-03-30

PRIOR PILING DATE: 1998-03-31

PRIOR APPLICATION NUMBER: 60/080107

PRIOR PILING DATE: 1998-04-01

PRIOR PILING DATE: 1998-04-08

PRIOR PILING DATE: 1998-04-15

PRIOR PILICATION NUMBER: 60/08129

PRIOR PILING DATE: 1998-04-15

PRIOR PELING DATE: 1998-04-15

PRIOR PILING DATE: 1998-04-15

PRIOR PELICATION NUMBER: 60/08129

PRIOR PILING DATE: 1998-04-15

PRIOR PILING DATE: 1998-04-15

PRIOR PILING DATE: 1998-04-15

PRIOR PELICATION NUMBER: 60/08136

PRIOR PILING DATE: 1998-04-15

PRIOR PILING DATE: 1998-04-15

PRIOR PILING DATE: 1998-04-15

PRIOR PELICATION NUMBER: 60/08136

PRIOR PILING DATE: 1998-04-15

PRIOR PILING DATE: 1998-04-15

PRIOR PILING DATE: 1998-04-15

PRIOR PELICATION NUMBER: 60/08136

PRIOR PILING DATE: 1998-04-15

PRIOR PILING DATE: 1998-04-15

PRIOR PILING DATE: 1998-04-15

PRIOR PRIOR DATE: 1998-04-20

PRIOR PILING DATE: 1998-04-20

PRIOR PILIN
```

```
1 MSLLPRRAPPVSMRLLAAALLLLLLALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKY 60
  1 MSILIPRRAPPVSMRLIAAALILILIALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKY 60
   0; Gaps
   61 PHCEEKMVIITTKSVSRYRGQEHCLHPKLQSTKRFIKWYNAWNEKRRVYEE 111
  61 PHCEEKAYVIITTKSVSRYRGQEHCLHPKLQSTKRFIKMYNAWNEKRRVYEE 111
  Length 111;
   Indels
  Query Match
100.0%; Score 587; DB 10;
Best Local Similarity 100.0%; Pred. No. 4.9e-58;
Matches 111; Conservative 0; Mismatches 0;
   UGS-09-978-285A-370
UGS-09-978-285A-370
Fublication No. US20030049633A1
GENERAL INFORMATION:
APPLICANT: ABAKenazi, Avi
APPLICANT: Baker Kevin P.
APPLICANT: Beter Kevin P.
APPLICANT: Beter Kevin P.
APPLICANT: Beter Kevin P.
APPLICANT: Estrara, Napoleon
APPLICANT: Ferrara, Napoleon
APPLICANT: Ferrara, Napoleon
APPLICANT: For Strara, Napoleon
APPLICANT: Gao, Wei-Qiang
APPLICANT: Goder, Hanspeter
APPLICANT: Gerber, Hanspeter
APPLICANT: Godard, Audrey
APPLICANT: Godwski, Paul J.
APPLICANT: Hillan, Kenneth J.
APPLICANT: Hillan, Kenneth J.
APPLICANT: Hillan, Kenneth J.
APPLICANT: Nuo, Sophia S.
APPLICANT: Nuo, Sophia S.
   TYPE: PRT
CRGANISM: Homo sapiens
US-09-978-608A-370
  -09-978-585A-370
  ò
   셤
   à
  ö
   1 MSLLPRRAPPVSMRLLAAALLLLLLALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKY 60
  1 MSLLPRRAPPVSMRLLAAALLLLLALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKY
  0; Gaps
   61 PHCEEXMVIITTKSVSRYRGQEHCLHPKLQSTKRFIKMYNAWNEKRVYEE 111
   61 PHCEEKMVIITTKSVSRYRGQEHCLHPKLQSTKRFIKWYNAMNEKRRVYEE 111
  Length 111;
  Indels
  Query Match
Best Local Similarity 100.0%; Pred. No. 4.9e-58;
Matches 111; Conservative 0; Mismatches 0;
  RESULT 7
US-09-978-608A-370
; Sequence 370, Application US/09978608A
; Sequence 370, Application US/09978608A
; GENERAL INFORMATION:
; APPLICANT: Ashkenati, Avi
; APPLICANT: Baker Kevin P.
; APPLICANT: Bocstein, David
; APPLICANT: Desnoyers, Luc
        PRIOR FILING DATE: 1998-04-29
PRIOR APPLICATION NUMBER: 60/083558
PRIOR PLING DATE: 1998-04-29
PRIOR PLING DATE: 1998-04-30
PRIOR PLING DATE: 1998-04-30
PRIOR PLING DATE: 1998-05-05
PRIOR PLING DATE: 1998-05-06
PRIOR PLING DATE: 1998-05-06
PRIOR PRING DATE: 1998-05-06
PRIOR PRING DATE: 1998-05-07
PRIOR PLING DATE: 1998-05-07
PRIOR PRING DATE: 1998-05-07
PRIOR PRIING DATE: 1998-05-07
PRIOR PRING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/08459
PRIOR PLING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/08460
PRIOR PLING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/08460
PRIOR PLING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/08463
PRIOR PLING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/08463
PRIOR PLING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/08533
PRIOR APPLICATION NUMBER: 60/08559
PRIOR PLING DATE: 1998-05-13
PRIOR APPLICATION NUMBER: 60/085579
PRIOR APPLICATION NUMBER: 60/085
```

ò

```
APPLICANT: Read, Natholas F.
APPLICANT: Read, Natholas F.
APPLICANT: Roy, Margaret Ann
APPLICANT: Shelton, David L.
APPLICANT: Stewart, Timethy A.
APPLICANT: Stewart, Timethy A.
APPLICANT: Tunas, Daniel
APPLICANT: Wood, William I.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Acids Encoding the Same
FILE REFRENCE: P2630PICLS
CURRENT APPLICATION NUMBER: US/09/978,585A
CURRENT FILING DATE: 2001-10-16
NUMBER OF SEQ ID NOS: 624
FILING DATE: 2001-10-16
NUMBER OF SEQ ID NOS: 624
FILING APPLICATION removed - See File Wrapper or Palm
ENENTH: 111
   APPLICANT Gerritsen, Mary B.
APPLICANT Goddard, Audrey
APPLICANT Goddard, Audrey
APPLICANT Goddard, Audrey
APPLICANT Goddard, Audrey
APPLICANT Gurney, Austin L.
APPLICANT Hillan, Kenneth J
APPLICANT Hillan, Kenneth J
APPLICANT Kuo, Sophia S.
APPLICANT Pani, James
APPLICANT Shelton, David L.
APPLICANT Shelton, David L.
APPLICANT Shelton, David L.
APPLICANT Stewart, Timochy A.
APPLICANT Wood, William I.
APPLICANT WOOD WOOD WILLIAM I.
APPLICANT WOOD WOOD WOOD WILLIAM I.
APPLICANT WOOD WOOD WOOD WILLIAM I.
APPLICANT WOOD WOOD WOOD WOOD WILLIAM I.
APPLICANT WOOD WOOD WOOD WOOD WAS ALLIAM I.
APPLICANT WOOD WOOD WAS ALLIAM I.
APPLICANT W
   1 MSLLPRRAPPVSMRLLAAALLLLLLLALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKY 60
  1 MSLLPRRAPPUSMRLLAAALLILLILALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKY 60
  0; Gaps
  61 PHCBEKMVIITTKSVSRYRGQEHCLHPKLQSTKRFIKMYNAWNEKRRVYBE 111
   61 PHCEEKMYIITTKSVSRYRGQEHCLHPKLQSTXRFIKWYNAWNEKRRVYBE 111
   Query Match
100.0%; Score 587; DB 10; Length 111;
Best Local Similarity 100.0%; Pred. No. 4.9e-58;
Matches 111; Conservative 0; Mismatches 0; Indels 0;
   RESULT 9
US-00-978-191A-370
US-00-978-191A-370
Sequence 370, Application US/09978191A
PUBLICATION: US20030050239A1
GENERAL INFORMATION:
APPLICANT: Baker Kevin P.
APPLICANT: Betein, David
APPLICANT: Betsein, Danid
APPLICANT: Betsoff, Rilen
APPLICANT: Ferrara, Napoleon
APPLICANT: Ferrara, Napoleon
APPLICANT: For Wat-Qiang
APPLICANT: For Wat-Qiang
APPLICANT: Geober, Hanspeter
   Baker Kevin P.
Baker Kevin P.
Botestein, David
Desnoyers, Luc
Eaton, Dan
Filvaroff Ellen
Fong, Sherman
Gao, Wei-Olang
Gerber, Hangspeer
Gerritsen, Mary E.
Goddard, Audrey
Goddwaki, Paul J.
Grimaldi, J. Christopher
Hillan, Kenneth J.
Kilavin, Ivar J.
Kulavin, Ivar J.
Fant. James, Janes, J.
Fant. James, J.
Fant. James, J.
Tumas, Danielhy A.
Tumas, Danielhy A.
  CURRENT FILING DATE: 2001-10-15
PRIOR APPLICATION NUMBER: 09/918585
PRIOR FILING DATE: 2001-07-30
   TYPE: PRT
ORGANISM: Homo sapiens
US-09-978-585A-370
  g
   \dot{\delta}
   Dp
```

```
PRIOR APPLICATION NUMBER: 60/062250
PRIOR FILING DATE: 1997-11-03
PRIOR FILING DATE: 1997-11-03
PRIOR FILING DATE: 1997-11-03
PRIOR FILING DATE: 1997-11-11
PRIOR FILING DATE: 1997-11-12
PRIOR PRICHARDON NUMBER: 60/06364
PRIOR PRICHARDON NUMBER: 60/077641
PRIOR FILING DATE: 1998-03-11
PRIOR PRICHARDON NUMBER: 60/077641
PRIOR PRICHARDON NUMBER: 60/07864
PRIOR PRICHARDON NUMBER: 60/078916
PRIOR PRICHARDON NUMBER: 60/078916
PRIOR PRICHARDON NUMBER: 60/078916
PRIOR PRICHARDON NUMBER: 60/078916
PRIOR PRICHARDON NUMBER: 60/078917
PRIOR PRICHARDON NUMBER: 60/08017
PR
```

```
PRICK FILING DATE: 1998-04-09

REATCR APPLICATION NUMBER: 60/081915

PRICK APPLICATION NUMBER: 60/081919

PRICK APPLICATION NUMBER: 60/081919

PRICK APPLICATION NUMBER: 60/081919

PRICK APPLICATION NUMBER: 60/081919

PRICK FILING DATE: 1998-04-15

PRICK FILING DATE: 1998-04-15

PRICK FILING DATE: 1998-04-16

PRICK FILING DATE: 1998-04-21

PRICK FILING DATE: 1998-04-21

PRICK FILING DATE: 1998-04-22

PRICK FILING DATE: 1998-04-23

PRICK FILING DATE: 1998-04-29

PRICK PLILING DATE: 1998-05-07

PRICK PLILING DATE: 199
```

```
ö
   9
  APPLICANT: Tumas, Daniel
APPLICANT: Tumas, Daniel
APPLICANT: Tumas, Daniel
APPLICANT: Williams, P. Mickey
APPLICANT: Williams, P. Mickey
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: P2630PIC17
CURRENT APPLICATION NUMBER: 09/978,403A
PRIOR APPLICATION NUMBER: 09/918585
PRIOR APPLICATION NUMBER: 60/062250
PRIOR APPLICATION NUMBER: 60/062250
PRIOR FILING DATE: 1997-10-17
PRIOR APPLICATION NUMBER: 60/064249
  1 MSLLPRRAPPVSWRLILAAALILLLALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKY
   1 MSLLPRRAPPVSMRLLAAALLLLLLLLALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKY
  Gaps
  61 PHCEERWVIITTKSVSRYRGQEHCLHPKLQSTKRFIKWYNAWNEKRRVYEE 111
  61 PHCEEKMVIITTKSVSRYRGQEHCLHPKLQSTKRFIKWYNAWNEKRKVYEE 111
   Length 111;
   Indels
   100.0%; Score 587; DB 10;
100.0%; Pred. No. 4.9e-58;
ive 0; Mismatches 0;
PRIOR FILING DATE: 1998-05-13
PRIOR PILING DATE: 1998-05-13
PRIOR APPLICATION NUMBER: 60/085582
PRIOR APPLICATION NUMBER: 60/085509
PRIOR PILING DATE: 1998-05-15
PRIOR PELING DATE: 1998-05-15
   Sequence 370, Application US/09978403A Publication No. US20030050240A1 GENERAL INFORMATION:
  Godowski, Paul'J.
Grimaldi, J. Christopher
Gurney, Austin L.
Hillan, Kenneth J
   APPLICANT: Ashkenazi, Avi
APPLICANT: Baker Kevin P.
APPLICANT: Botstein, David
APPLICANT: Beton, Dan
APPLICANT: Eaton, Dan
APPLICANT: Ferrara, Napoleon
APPLICANT: Filvaroff, Ellen
APPLICANT: Filvaroff, Ellen
APPLICANT: Fong, Sherman
   Ouery Match 100.0%;
Best Local Similarity 100.0%;
Matches 111; Conservative 0
   Gao, Wei-Qiang
Gerber, Hanspeter
Gerritsen, Mary E.
Goddard, Audrey
   Shelton, David L.
Stewart, Timothy A.
   Pan, James;
Paoni, Nicholas F
  Kljavin, Ivar J.
Kuo, Sophia S.
Napier, Mary A.
   US-09-978-403A-370
   유
   ò
```

Page 12

PRIOR FILING DATE: 1997-11-03
PRIOR APPLICATION NUMBER: 60/066314
PRIOR PRIOR TILING DATE: 1997-11-13
PRIOR PRIOR FILING DATE: 1997-11-13
PRIOR PRIOR FILING DATE: 1997-11-12
PRIOR PRIOR DATE: 1997-11-12
PRIOR PRIOR DATE: 1997-11-12
PRIOR PRIOR DATE: 1997-11-12
PRIOR PRIOR DATE: 1996-03-10
PRIOR PRIOR DATE: 1998-03-11
PRIOR PRIOR DATE: 1998-03-11
PRIOR PRIOR DATE: 1998-03-11
PRIOR PRIOR DATE: 1998-03-11
PRIOR PRIOR DATE: 1998-03-12
PRIOR PRIOR DATE: 1998-03-12
PRIOR PRIOR DATE: 1998-03-13
PRIOR PRIOR DATE: 1998-03-20
PRIOR PRIOR DATE: 1998-03-20
PRIOR PRIOR DATE: 1998-03-13
PRIOR PRIOR DATE: 1998-03-20
PRIOR PRIOR DATE: 1998-03-30
PRIOR PRIOR DATE: 1998-03-31
PRIOR PRIOR PRIOR DATE: 1998-03-31
PRIOR PRIOR PRIOR DATE: 1998-04-01
PRIOR PRIOR PRI

PRIOR APPLICATION NUMBER: 60/081819
PRIOR FILING DATE: 1998-04-15
PRIOR FILING DATE: 1998-04-15
PRIOR PRIOR APPLICATION NUMBER: 60/08152
PRIOR PRIOR APPLICATION NUMBER: 60/08156
PRIOR PRIOR PRIOR DATE: 1998-04-15
PRIOR PRIOR DATE: 1998-04-15
PRIOR PRIOR DATE: 1998-04-15
PRIOR PRIOR DATE: 1998-04-15
PRIOR PRIOR DATE: 1998-04-15
PRIOR PRIOR DATE: 1998-04-2
PRIOR PLING DATE: 1998-04-2
PRIOR PRIOR DATE: 1998-05-0
PRIOR PRIOR DATE: 1998-04-2
PRIOR PRI

us-09-978-189-370.rapb

```
ö
   APPLICANT: Pan, James
APPLICANT: Pani, Nicholas F.
APPLICANT: Roy, Margaret Ann
APPLICANT: Roy, Margaret Ann
APPLICANT: Shelton, David L.
APPLICANT: Stewart, Timothy A.
APPLICANT: Tunas, Daniel
APPLICANT: Tunas, Daniel
APPLICANT: Wood, William I.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION WINBER: US/09/978,564A
CURRENT FILING DATE: 2001-10-16
PRIOR PILING DATE: 2001-07-30
PRIOR PILING DATE: 1997-10-17
PRIOR PLING DATE: 1997-11-13
PRIOR FILING DATE: 1997-11-13
  1 MSLLPRRAPPVSMRLLAAALLLLLALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKY 60
   1 MSLLPRRAPPVSMRLLAAALLLLLLALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKY 60
   0; Indels 0; Gaps
   61 PHCEERMVIITTKSVSRYRGQEHCLHPKLQSTKRFIKWYNAWNEKRKVYBE 111
   61 PHCEEKMVIITTKSVSRYRGQEHCLHPKLQSTKRFIKWYNAWNEKRRVYEE 111
  100.0%; Score 587; DB 10; Length 111; 100.0%; Pred. No. 4.9e-58; tive 0; Mismatches 0; Indels 0
PRIOR FILING DATE: 1998-05-15
PRIOR PELING DATE: 1998-05-15
PRIOR PELING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/08569
PRIOR PILING DATE: 1998-05-15
PRIOR PRILING DATE: 1998-05-15
PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/08559
PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/08559
PRIOR APPLICATION NUMBER: 60/08559
PRIOR PILING DATE: 1998-05-15
PRIOR PRILING DATE: 1998-05-15
PRIOR PLING DATE: 1998-05-15
PRIOR PLING DATE: 1998-05-15
PRIOR PLING DATE: 1998-05-15
   RESULT 11
US-09-978-564A-370
Sequence 370, Application US/09978564A
Publication No. US20030050241A1
GENERAL INFORMATION:
APPLICANT: Ashkenazi, Avi
  Godowski, Paul J.
Grimaldi, J. Christopher
Gurney, Austin L.
Hillan, Kenneth J
KKljavin, Ivar J.
Kuo, Sophia S.
  Ferrara, Napoleon
Filvaroff, Ellen
Fong, Sherman
Gao, Wei-Qiang
Gerber, Hanspeter
  Gerritsen, Mary E.
Goddard, Audrey
   Baker, Kevin P.
Botstein, David
Desnoyers, Luc
Baton, Dan
  Query Match
Best Local Similarity 100.0
Matches 111; Conservative
   APPLICANT:
APPLICANT:
APPLICANT:
  g
   δ
```

```
PRIOR APPLICATION NUMBER: 60/07450
PRIOR APPLICATION NUMBER: 60/07451
PRIOR APPLICATION NUMBER: 60/077641
PRIOR PLING DATE: 1998-03-11
PRIOR PLING DATE: 1998-03-12
PRIOR PLING DATE: 1998-03-12
PRIOR PLING DATE: 1998-03-12
PRIOR PLING DATE: 1998-03-13
PRIOR PLING DATE: 1998-03-13
PRIOR PLING DATE: 1998-03-13
PRIOR APPLICATION NUMBER: 60/07604
PRIOR PLING DATE: 1998-03-13
PRIOR PLING DATE: 1998-03-13
PRIOR APPLICATION NUMBER: 60/076919
PRIOR PRIOR DATE: 1998-03-13
PRIOR PRILING DATE: 1998-03-20
PRIOR PELING DATE: 1998-03-27
PRIOR PLING DATE: 1998-03-27
PRIOR PLING DATE: 1998-03-27
PRIOR PELING DATE: 1998-03-37
PRIOR PELING DATE: 1998-04-01
PRIOR APPLICATION NUMBER: 60/080139
PRIOR PELICATION NUMBER: 60/080139
PRIOR PELING DATE: 1998-04-01
PRIOR PELING DATE: 1998-04-09
PRIOR PEL
```

```
RELING DATE: 1998-04-29

RELING DATE: 1998-04-29

REPLING DATE: 1998-04-29

RELING DATE: 1998-05-06

RELING DATE: 1998-05-06

RELING DATE: 1998-05-07

RELING DATE: 1998-05-13

RELING DATE: 1998-05
  RELING DATE: 1998-04-15

RETLING DATE: 1998-04-15

RAPPLICATION NUMBER: 60/08268

RAPLICATION NUMBER: 60/08269

RAPLICATION NUMBER: 60/08269

RAPLICATION NUMBER: 60/082004

RAPLICATION NUMBER: 60/082004

RETLING DATE: 1998-04-22

RAPLICATION NUMBER: 60/082004

RETLING DATE: 1998-04-22

RAPLICATION NUMBER: 60/082700

RAPLICATION NUMBER: 60/082797

RETLING DATE: 1998-04-22

RETLING DATE: 1998-04-22

RETLING DATE: 1998-04-22

RETLING DATE: 1998-04-22

RETLING DATE: 1998-04-23

RETLING DATE: 1998-04-29

ILING DATE: 1998-04-15
APPLICATION NUMBER: 60/081952
FILING DATE: 1998-04-15
APPLICATION NUMBER: 60/081838
PRILICA PRILIC
```

```
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic TITLE OF INVENTION: Acids Encoding the Same FILE REFERENCE: P2630PLGS Encoding the Same FILE REFERENCE: P2630PLGS Encoding the Same FILE REFERENCE: P2630PLGS 105/099,833A CURRENT FILING DATE: 2001-10-24 PRIOR APPLICATION NUMBER: 09/918585 PRIOR RILING DATE: 2001-07-30 PRIOR APPLICATION NUMBER: 60/064249 PRIOR FILING DATE: 1997-10-17 PRIOR FILING DATE: 1997-11-13 PRIOR FILING DATE: 1997-11-13 PRIOR FILING DATE: 1997-11-13 PRIOR FILING DATE: 1997-11-13 PRIOR FILING DATE: 1997-11-12 PRIOR FILING DATE: 1997-11-12 PRIOR PILING DATE: 1997-11-12
  1 MSLLPRRAPPVSMRLLAAALLLLLLALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKY 60
   1 MSLLPRRAPPVSMRLLAAALLILILLALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKY 60
   0; Gaps
   61 PHCBERMVIITTKSVSRYRGQEHCLHPKLQSTKRFIKWYNAMNBKRRVYBE 111
   61 PHCEEKMYIITTKSVSRYRGQEHCLHPKLQSTKRFIKWYNAWNEKRRVYEE 111
  Length 111;
   Indels
   Query Match
100.0%; Score 587; DB 10;
Best Local Similarity 100.0%; Pred. No. 4.9e-58;
Matches 111; Conservative 0; Mismatches 0;
PRIOR APPLICATION NUMBER: 60/085689
PRIOR FILING DATE: 1998-05-15
PRIOR PLILOGATION NUMBER: 60/085579
PRIOR FILING DATE: 1998-05-15
PRIOR PLILOGATION NUMBER: 60/08580
PRIOR PLILOG DATE: 1998-05-15
PRIOR PLILOG DATE: 1998-05-15
PRIOR PLILOGATION NUMBER: 60/08553
PRIOR PLILOGATION NUMBER: 60/08557
PRIOR APPLICATION NUMBER: 60/08567
PRIOR APPLICATION NUMBER: 60/085697
   Sequence 370, Application US/0999833A Publication No. US20030054405A1 GENERAL INFORMATION: APPLICANT: Ashkenazi, Avi
   Godowski, Paul J.
Grimaldi, J. Christopher
Gurney, Austin L.
Hillan, Kenneth J
  Paoni, Nicholas F.
Roy, Margaret Ann
Shelton, David L.
Stewart, Timothy A.
Tumas, Daniel
  Williams, P. Mickey Wood, William I.
  Fong, Sherman
Gao, Wei-Qiang
Gerber, Hanspeter
Gerritsen, Mary E.
Goddard, Audrey
  Eaton, Dan
Ferrara, Napoleon
Filvaroff, Ellen
  Kljavin, Ivar J.
Kuo, Sophia S.
Napier, Mary A.
  Baker Kevin P.
Botstein, David
Desnoyers, Luc
   Pan, James,
  US-09-999-833A-370
   APPLICANT:
APPLICANT:
APPLICANT:
   APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
  APPLICANT:
   APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
   APPLICANT:
APPLICANT:
APPLICANT:
   g
   ठ
```

PRIOR PILING DATE: 1998-03-03

PRIOR APPLICATION NUMBER: 60/077632

PRIOR APPLICATION NUMBER: 60/077641

PRIOR APPLICATION NUMBER: 60/077641

PRIOR APPLICATION NUMBER: 60/07791

PRIOR APPLICATION NUMBER: 60/07891

PRIOR APPLICATION NUMBER: 60/07891

PRIOR APPLICATION NUMBER: 60/07929

PRIOR APPLICATION NUMBER: 60/07929

PRIOR PLILNG DATE: 1988-03-20

PRIOR APPLICATION NUMBER: 60/07929

PRIOR PLILNG DATE: 1989-03-20

PRIOR PLILNG DATE: 1989-03-30

PRIOR PLILNG DATE: 1989-03-30

PRIOR PLILNG DATE: 1989-03-30

PRIOR PLILNG DATE: 1989-03-30

PRIOR PLILNG DATE: 1989-03-31

PRIOR PLILNG DATE: 1989-03-31

PRIOR PLILNG DATE: 1989-03-31

PRIOR PLILNG DATE: 1998-03-31

PRIOR PRILING DATE: 1998-03-31

PRIOR PLILNG DATE: 1998-03-31

PRIOR PRILING DATE: 1998-03-31

PRIOR PRILING DATE: 1998-03-31

PRIOR PRILING DATE: 1998-03-31

PRIOR PRILING DATE: 1998-04-01

PRIO

PRIOR APPLICATION NUMBER: 60/08158
PRIOR APPLICATION NUMBER: 60/08268
PRIOR APPLICATION NUMBER: 60/08269
PRIOR FILING DATE: 1998-04-2
PRIOR PRILOR DATE: 1998-05-05
PRIOR PRILOR DATE: 1998-05-05
PRIOR PRILOR DATE: 1998-05-05
PRIOR PRILOR DATE: 1998-05-05
PRIOR PRILOR DATE: 1998-05-07
PRIOR

```
APPLICANT: Scewart, illocity A.
APPLICANT: Tumas, Daniel
APPLICANT: Williams, P. Mickey
APPLICANT: Williams, P. Mickey
APPLICANT: Williams.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Acids Encoding the Same
FILE REPRENENCE: P5530PLIC_2
CURRENT APPLICATION NUMBER: 09/9181,915A
CURRENT APPLICATION NUMBER: 09/91885
PRIOR PILING DATE: 2001-10-16
PRIOR PILING DATE: 1997-10-17
PRIOR PILING DATE: 1997-11-03
PRIOR PILING DATE: 1997-11-21
PRIOR PILING DATE: 1998-03-10
PRIOR PILING DATE: 1998-03-10
PRIOR PILING DATE: 1998-03-11
   1 MSLLPRRAPPVSMRLLAAALLLLLLALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKY 60
   1 MSLLPRRAPPVSWRLLAAALLLLLALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKY 60
   0; Gaps
   61 PHCEEKWVIITTKSVSRYRGQEHCLHPKLQSTKRFIKWYNAWNEKRVYEE 111
  61 PHCEEKWYNITTKSVSRYRGQEHCLAPKLQSTKRFIKWYNAWNEKRRVYEE 111
   Query Match 100.0%; Score 597; DB 10; Length 111; Best Local Similarity 100.0%; Pred. No. 4.9e-58; Matches 111; Conservative 0; Mismatches 0; Indels 0.
PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/085580
PRIOR PILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/085573
PRIOR FILING DATE: 1988-05-15
PRIOR PRILING DATE: 1988-05-15
PRIOR PILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/085697
  Baker Kevin P.
Baker Kevin P.
Botstein, David
Desnoyers, Luc
Eaton, Dan
Ferrara, Napoleon
Filvaroff, Ellen
Fong, Sherman
Gao, Wel-Qiang
Gerber, Hanspeter
Gerritsen, Mary E.
Goddard, Audrey,
Goddard, Audrey,
Goddard, Austin L.
Hillan, Kenneth J.
Kljavin, Ivar J.
Kljavin, Ivar J.
Kljavin, Ivar J.
Napier, Mary A.
Pan, James;
   Sequence 370, Application US/09981915A Publication No. US20030054986A1 GENERAL INFORMATION: APPLICANT: ABARcanazi, Avi
   Paoni, Nicholas F.
Roy, Margaret Ann
Shelton, David L.
Stewart, Timothy A.
   -09-981-915A-370
  APPLICANT:
APPLICANT:
  à
  셤
   ઠે
  g
```

PRIOR APPLICATION NUMBER: 60/07641
PRIOR PELICATION NUMBER: 60/07649
PRIOR PELING DATE: 1998-03-11
PRIOR PLING DATE: 1998-03-12
PRIOR PLING DATE: 1998-03-13
PRIOR PLING DATE: 1998-03-13
PRIOR PLING DATE: 1998-03-20
PRIOR PLING DATE: 1998-03-20
PRIOR PLING DATE: 1998-03-20
PRIOR PLING DATE: 1998-03-20
PRIOR PLING DATE: 1998-03-25
PRIOR PLING DATE: 1998-03-27
PRIOR PLING DATE: 1998-03-31
PRIOR PLING DATE: 1998-04-01
PRIO

PRIOR FILING DATE: 1998-04-21
PRIOR APPLICATION NUMBER: 60/082569
PRIOR PLING DATE: 1998-04-22
PRIOR PLING DATE: 1998-04-23
PRIOR PLING DATE: 1998-04-28
PRIOR PLING DATE: 1998-04-29
PRIOR PLING DATE: 1998-05-07
PRIOR PLING DATE: 1998-05-18
PRIOR PL

```
PRIOR PREIGATION NUMBER: 6(005573)
PRIOR PRIOR PRINCE NUMBER: 6(005574)
PRIOR APPLICATION NUMBER: 6(005574)
PRIOR APPLICATION NUMBER: 6(005574)
PRIOR APPLICATION NUMBER: 6(005574)
PRIOR APPLICATION NUMBER: 6(005574)
PRIOR PRIOR
```

|                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 80332<br>80332<br>80333<br>8107<br>8119<br>8119<br>81818<br>81818<br>8183<br>8183                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 0/08256<br>21             |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| 1998-03<br>TUMBER:<br>1998-03<br>TUMBER:<br>1998-03<br>TUMBER:<br>1998-03<br>TUMBER:<br>1998-03<br>TUMBER:<br>1998-03                                                                                                                                                               | TUMBER: 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 11998-03 1199 | NUMBER: 1998-04                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | NUMBER<br>1998-           |
| FILING DATE APPLICATION FILING DATE APPLICATION APPLICATION APPLICATION FILING DATE APPLICATION FILING DATE APPLICATION FILING DATE APPLICATION APPLICATION FILING DATE APPLICATION | APPLICATION APPLICATION APPLICATION FILING DATE APPLICATION APPLICATION APPLICATION FILING DATE APPLICATION APPLICATION APPLICATION APPLICATION FILING DATE APPLICATION FILING | APPLICATION DATE: APPLICATION DATE: FILING DATE: APPLICATION DATE: | APPLICATION<br>FILING DAT |
| RRRRRRRRRRRRRR                                                                                                                                                                                                                                                                      | * 我我我我我我我我我我我我我我我我我我我我我我                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | PRIOR  | K K                       |

PRIOR APPLICATION NUMBER: 60/08204
PRIOR PLILOD ADTE: 1998-04-2
PRIOR PELICATION NUMBER: 60/08204
PRIOR PELICATION NUMBER: 60/08204
PRIOR PELICATION NUMBER: 60/08207
PRIOR PELICATION NUMBER: 60/08207
PRIOR PELICATION NUMBER: 60/08207
PRIOR PELICATION NUMBER: 60/08202
PRIOR PELICATION NUMBER: 60/08302
PRIOR PELING DATE: 1998-04-29
PRIOR PELING DATE: 1998-05-07
PRIOR PELING DATE: 1998-05-18
PRIO

```
1 MSLLPRRAPPVSWRLLAAALLILILALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKY 60
   APPLICANT: Williams, P. Mickey
APPLICANT: Wold, William I.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: P2630PIC1
CURRENT APPLICATION NUMBER: US/09/918, S85A
CURRENT FILING DATE: 2001-07-30
PRIOR APPLICATION NUMBER: 60/062250
   1 MSLLPRRAPPVSMRLLAAALLLLLLLALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKY
   Gaps
   61 PHCEEKMVIITTKSVSRYRGQEHCLHPKLQSTKRFIKWYNAWNEKRRVYEE 111
   61 PHCEEKWYIITTKSVSRYRGQEHCLHPKLQSTKRFIKWYNAWNEKRRVYEE 111
   Query Match 100.0%; Score 587; DB 10; Length 111; Best Local Similarity 100.0%; Pred. No. 4.9e-58; Matches 111; Conservative 0; Mismatches 0; Indels 0
  Sequence 370, Application US/09918585A
Publication No. US20030060406A1
GENERAL INFORMATION:
APPLICANT: Baker Kevin P.
APPLICANT: Beter Kevin P.
APPLICANT: Beterin, David
APPLICANT: Beterin, David
APPLICANT: Eaton, Dan
  Godowski, Paul J.
Grimaldi, J. Christopher
Gurney, Austin L.
Hillan, Kenneth J.
Kljavin, Ivar J.
Kuo, Sophia S.
Napier, Mary A.
   PRIOR APPLICATION NUMBER: 60/064249
PRIOR FILING DATE: 1997-11-03
PRIOR FILING DATE: 1997-11-13
PRIOR FILING DATE: 1997-11-13
PRIOR PLING DATE: 1997-11-12
PRIOR PLING DATE: 1997-11-21
PRIOR PLING DATE: 1997-10-00
PRIOR PPLICATION NUMBER: 60/077450
PRIOR PLING DATE: 1998-03-10
PRIOR PLING DATE: 1998-03-10
PRIOR PLING DATE: 1998-03-10
PRIOR PLING DATE: 1998-03-11
PRIOR PLING DATE: 1998-03-11
PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/085697
   PRICK FILING DATE: 1998-03-11
EARCA APPLICATION NUMBER: 60/077649
PRICK FILING DATE: 1998-03-11
PRICK APPLICATION NUMBER: 60/077791
  FILING DATE: 1998-03-12
APPLICATION NUMBER: 60/078004
FILING DATE: 1998-03-13
   Pan, James,
Pann, Nacholas F.
Roy, Margaret Ann
Sollon, David L.
Stewart, Timothy A.
Tumas, Daniel
Williams, P. Mickey
Wood, William I.
   Ferrara, Napoleon
Filvaroff, Ellen
Fong, Sherman
Gao, Wei-Qiang
Gerber, Hansperer
Gerricsen, Mary E.
  RESULT 15
US-09-918-585A-370
  APPLICANT:
APPLICANT:
APPLICANT:
  APPLICANT:
APPLICANT:
APPLICANT:
  DÞ
  ò
  g
```

```
PRIOR APPLICATION NUMBER: 60/07896
PRIOR PELLING DATE: 1998-03-20
PRIOR PELLING DATE: 1998-03-25
PRIOR PELLORICATION NUMBER: 60/079689
PRIOR PELLING DATE: 1998-03-27
PRIOR PELLING DATE: 1998-03-31
PRIOR PELLING DATE: 1998-04-01
PRIOR PELLING DATE: 1998-04-15
PRIOR PELLING DATE:
```

```
PRIOR PILING DATE: 1998-04-22
PRIOR APPLICATION NUMBER: 60/08239
PRIOR PILING DATE: 1998-04-23
PRIOR PILING DATE: 1998-04-29
PRIOR PILING DATE: 1998-05-06
PRIOR PILING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/08463
PRIOR PILING DATE: 1998-05-07
PRIOR PILING DATE: 1998-05-15
PRIOR PILING DATE: 1998-05
```

| 0'                                                                                                   | 09                                                               | 09                                                                |                                                            |                                                            |
|------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|-------------------------------------------------------------------|------------------------------------------------------------|------------------------------------------------------------|
| 11;<br>0; Gaps                                                                                       | EMKPKY                                                           | EMKPKY                                                            | п                                                          | н                                                          |
| 111;<br>0;                                                                                           | SDVKKL                                                           | SDVKKL                                                            | YEE 11                                                     | YEE 11                                                     |
| 100.0%; Score 587; DB 10; Length 111;<br>100.0%; Pred. No. 4.9e-58;<br>ive 0; Mismatches 0; Indels 0 | 1 MSLLPRRAPPVSWRLLAAALLLLLALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKY 60 | 1 MSLIPRRAPPVSMRLIAAALLILILAATTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKY 60 | 61 PHCEEKWVIITTKSVSRYRGQBHCLHPKLQSTKRFIKWYNAWNEKRRVYEE 111 | 61 PHCEEKMYLITTKSVSRYRGGEHCLHPKLGSTKRFIKWYNAMNEKRRVYEE 111 |
| B 10; I<br>e-58;<br>0; I                                                                             | SKCKCSF                                                          | SKCKCSF                                                           | FI KWYNZ                                                   | FIKWYNZ                                                    |
| 37; DI<br>5. 4.96<br>cches                                                                           | FARVDG                                                           | rarvog(                                                           | LOSTKR                                                     | LOSTKRI                                                    |
| 100.0%; Score 587; DB 10;<br>100.0%; Pred. No. 4.9e-58;<br>ive 0; Mismatches 0;                      | LLLALY                                                           | LLLALY                                                            | HCLHPK                                                     | HCLHPK                                                     |
| 0,8;<br>0,8;<br>0,1                                                                                  | AAALLL]                                                          | PAPLLL                                                            | RYRGOE                                                     | RYRGOE                                                     |
| 100.0<br>100.0<br>ative                                                                              | VSMRLL                                                           | VSMRLL                                                            | TTKSVS                                                     | TTKSVS                                                     |
| Query Match Best Local Similarity 100.0%; Pred. No. 4.99 Matches 111; Conservative 0; Mismatches     | SLLPRRAPPVSMRLLAAALLLLLLLALYTARVD                                | PRRAPP                                                            | EKWII                                                      | EKMVII                                                     |
| th<br>  Simil<br>  Simil                                                                             | 1 MSLI                                                           | 1 MSLI                                                            | 51 PHCE                                                    | 61 PHCE                                                    |
| Query Match<br>Best Local S<br>Matches 1111                                                          |                                                                  |                                                                   | -                                                          | -                                                          |
| Que:<br>Besi<br>Mato                                                                                 | ò                                                                | Бр                                                                | ò                                                          | පු                                                         |

Search completed: April 22, 2004, 12:39:35 Job time : 44 secs us-09-978-189-370.rag

Page 1

```
April 22, 2004, 12:25:57 ; Search time 55 Seconds (without alignments) 570.232 Million cell updates/sec
   US-09-978-189-370
587
1 MSLLPRRAPPVSMRLLAAAL.....TKRFIKWYNAWNEKRRVYEE 111
GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
   Total number of hits satisfying chosen parameters:
   1586107 seqs, 282547505 residues
   OM protein - protein search, using sw model
  Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
  BLOSUM62
Gapop 10.0 , Gapext 0.5
  A_Geneseq_29Jan04:*
1: geneseqp1990s:*
2: geneseqp1990s:*
4: geneseqp2001s:*
5: geneseqp2001s:*
6: geneseqp2003s:*
7: geneseqp2003bs:*
8: geneseqp2003bs:*
   Minimum DB seq length: 0 Maximum DB seq length: 20000000000
   Title:
Perfect score:
Sequence:
  Scoring table:
  Database :
   Searched:
   Run on:
```

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

| Description         | Aay41739 Human PRO Aay28290 Tim-1 pro Aab44295 Human PRO Aab84429 Human PRO Aab84429 Human Ren Abg70798 Human Bol Abo25241 Novel hum Abb22247 Novel hum Abb23940 Amino aci Abu80394 Human Sec Abu80394 Human Sec Abu80394 Human Sec Ada24909 Novel hum Abo19596 Novel hum Ada1270 Human Sec Ada2409 Human Sec Ada4018 Human Sec Adc44018 Human Sec Adc66172 Human Sec Adc66174 Human Sec Adc66177 Human Sec |             |
|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| SUMMARIES           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |             |
| DB                  | 00mm4000000000000000000000000000000000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |             |
| Length              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | !<br>!<br>! |
| %<br>Query<br>Match |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |             |
| Score               | 6 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |             |
| Result<br>No.       | 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |             |

| 1 Human sec 6 Human sec 7 Human sec 8 Human sec 8 Human sec 8 Human sec 8 Human sec 7 Human sec 6 Human sec 7 Human sec 7 Human sec 6 Human sec 6 Human sec 7 Human sec 7 Human sec 8 Human nec |          |                           |           |           |         | ation;<br>disorder;                         |             |          |         |           |                |         |            |       |          |       |         |          |            |            |            |              |        |           |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---------------------------|-----------|-----------|---------|---------------------------------------------|-------------|----------|---------|-----------|----------------|---------|------------|-------|----------|-------|---------|----------|------------|------------|------------|--------------|--------|-----------|
| Adc4141 Adc6746 Adc4203 Adc4203 Adc4203 Adc4318 Adc1318 Adc1718 Adc1718 Adc4718 Adc690                                                                                                                                                                      |          |                           |           |           |         | rimer, hybridis<br>lular adhesion           |             |          |         |           |                |         |            |       |          |       |         |          |            |            |            |              |        |           |
| 11<br>30<br>66<br>67<br>70<br>70<br>70<br>70<br>70<br>70<br>70<br>70<br>70<br>70<br>70<br>70<br>70                                                                                                                                                                                                                                                                                                                                                                                                          | IGNMENTS |                           |           |           |         | tag; PCR p<br>rancer; cel                   |             |          |         |           |                |         |            |       |          |       |         |          |            |            |            |              |        |           |
| ADC4141<br>ADC6746<br>ADC6240<br>ADC6240<br>ADC4240<br>ADC318<br>ADD7318<br>ADD7254<br>ADD7254<br>ADC7254<br>AAW3103<br>AAW3103<br>AAW3103<br>AAW3103<br>AAW3103<br>AAW3103<br>AAW3103<br>AAW3103                                                                                                                                                                                                                                                                                                           | ALIG     | 111 AA.                   |           |           | Ge.     | sequence<br>sorder;<br>rane pro             |             |          |         |           | ρ, ρ           |         |            |       |          |       |         |          | <u>.</u> . | <br>. L. ( | ο, ο.      |              | ъ.     | <br>ը, ը, |
| LLLLLLLLLL0000444000044                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |          | in;                       |           | ۲,        | sequenc | ed<br>ent                                   |             |          |         | 502       | 200            | 44      | 6 2        | 101   | 8910     | 9     | 4.0     | 533      | 0.0        | o vo c     | 2 6        | 7.2          | 55     | 2 2 3     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |          | ; protein;                |           | st entry) | ain     | ST; expresse<br>coagulation<br>ein; transme |             |          |         | 9WO-US005 | -007           | -007    | -007       | 000   | 8US-0078 | -007  | -007    | -007     | -007       | - 007      | -007       | -008<br>-008 | 800-   | 800-      |
| 00000000000000000000000000000000000000                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |          | andard;                   |           | (fir      | 3 prot  | d E                                         | W           |          |         | ο,        | σι σ           |         |            | , , , |          |       | <br>o o |          | 0.0        |            |            | <br>o        |        | 00        |
| 0.000000000000000000000000000000000000                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |          | 1739 Bt                   | 1739;     | 3C-1999   | PR027   | n; PRO;<br>e; bloo<br>eted pr               | варі        | 46281-A2 | 3P-1999 | ነጸ-1999   | 91.            | 159     | 6.         | 10.   | 1R-1998  | 15.   | . 19    | 19       | 9 5        | 4 14 1     | 94.        | 19           | 19     | 94        |
| 20000000000000000000000000000000000000                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | ٠.       | SULT 1<br>X41739<br>AAY41 | AAY41     | 07-DE     | Human   | Human;<br>probe;<br>secrete                 | ဋ           | W0994    | 16-SE   | 08-MAR    |                |         |            |       | 20-MAR   |       |         |          |            |            |            |              |        |           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |          | ED 24                     | <b>\$</b> | (남        | ž 🖁 🕃   | (888)                                       | <b>₹8</b> ¥ | A PN     | (R)     | X F 3     | 7 7 4<br>7 4 6 | . E. E. | <b>E</b> E | . E E | 7 F E    | P. P. | K K     | PR<br>PR | <b>P</b>   | 7 H F      | <u>ተ</u> ር | 띴 띴          | ም<br>የ | ዊ ዊ       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | ·        |                           |           |           | •       | <u>.</u>                                    |             |          |         |           |                |         |            |       |          |       |         |          |            |            |            |              |        |           |

Claim 12; Fig 149; 530pp; English

ö

0; Gaps

100.0%; Score 587; DB 2; Length 111; 100.0%; Pred. No. 8.9e-60; tive 0; Mismatches 0; Indels 0

Ouery Match Best Local Similarity 100.' Matches 111, Conservative

ð g ò

Sequence 111 AA;

9

1 MSLLPRRAPPVSMRLLAAALLLLLLALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKY 1 MSLLPRRAPPVSMRLLAAALLLLLLLLLTYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKY

PHCBEKAVIITTKSVSRYRGQEHCLHPKLQSTKRFIKWYNAWNEKRRVYEE 111

61

AAY28290 standard; protein; 111

RESULT 2 **AAY28290**  AAY28290;

The present invention describes secreted and transmembrane polypeptides and their polymclectides. The nucleotide sequences are useful as sources of probes, primers, for chromosome mapping, and for generation of antisense sequences. They can also be used to create transgenic animals. The proteins can be used to treat a variety of diseases and disorders, depending on their function. Diseases that may be treated include blood coagulation disorders, cancers and cellular adhesion disorders. They may also be used to raise antibodies. AAZ33891 to AAZ34338, and AAY41685 to AAY41774 represent polynuclectide and polypeptide sequence given in the exemplification of the present invention

xxxyyyyyyy

```
98US-0080334P.
98US-0081034P.
98US-0081071P.
98US-00811071P.
98US-00811071P.
98US-00811073P.
98US-00811073P.
98US-00811072P.
  (GETH ) GENENTECH INC
      01-APR-1998

08-APR-1998

08-APR-1998

09-APR-1998

09-APR-1998

15-APR-1998

15-APR-1998

15-APR-1998

15-APR-1998

15-APR-1998

22-APR-1998

22-APR-1998

23-APR-1998

23-APR-1998

23-APR-1998

23-APR-1998

29-APR-1998

29-APR-1998

29-APR-1998

29-APR-1998

29-APR-1998

29-APR-1998

29-APR-1998

06-MAY-1998

06-MAY-1998

06-MAY-1998

06-MAY-1998

06-MAY-1998

06-MAY-1998

07-MAY-1998

07-MAY-1998

07-MAY-1998

07-MAY-1998

07-MAY-1998

07-MAY-1998

07-MAY-1998

07-MAY-1998
  15-MAY-1998;
15-MAY-1998;
15-MAY-1998;
15-MAY-1998;
   28-MAY-1998;
28-MAY-1998;
   30-JUL-1998;
   22-MAY-1998
22-MAY-1998
```

```
Chemokine, CXC, Tim-1, inflammation, heart attack, stroke, infection, se, trauma, radiation, burns, frostbite, corrosive chemical, gene therapy.
  끍
   This is the amino acid sequence for the Tim-1 CXC chemokine. The Tim-1 gene can be used to design therapeutic tools for treating inflammation due to stimuli such as heart attacks and stroke, infection, physical trauma, UV or ionizing radiation, burns, frostbite or corrosive chemicals. The Tim-1 gene and subgenomic polynucleotides can be used in gene therapy
   A new human CXC chemokine, Tim-1, useful for treating inflammation
   Claim 1; Page 43; 46pp; English
  98WO-US026546
   97US-0068955P
  Chen TT, Pot D, Kassam A;
   28-SEP-1999 (first entry)
   WPI; 1999-430244/36.
N-PSDB; AAX89708.
   (CHIR ) CHIRON CORP
   Sequence 111 AA;
  Tim-1 protein
   14-DEC-1998;
   30-DEC-1997;
  08-JUL-1999.
  WO9933990-A1
  Homo sapiens
```

DB 2; Length 111;

100.0%; Score 587;

Query Match

New secreted and transmembrane polypeptides and their polynucleotides, useful for treating blood coagulation disorders, cancers and cellular adhesion disorders.

Chen J;

ΚP,

Baker

Yuan J,

ď

Gurney

Goddard A,

Wood WI,

WPI; 1999-551358/46. N-PSDB; AAZ34205.

```
ö
  1 MSLLPRRAPPVSMRLLAAALLLLLLLALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKY 60
  dermatological; antitarhitit; antitheumatic; immunosuppressive; haematological; antitarhitit; antitheumatic; immunosuppressive; antitheumatic; antitheumatic; antitheumatic; neuroprotective; antiantentic; santitheumatoid, antidabetic; neuroprotective; antiantentic; systemic lugue erythematosus; rheumatoid arthritis; osteoarthritis; spondyloarthropathy; systemic sclerosis; aarcoidosis; diopathic inflammatory myoathy; Systemic sclerosis; arcoidosis; systemic vasculitis; autoimmune haemolytic anaemia; diabetes mellitus; autoimmune thrombocytopathy; mimune-mediated ernal disease; autoimmune disease; hapatobiliary disease; whipple's disease; inflammatory bowel disease; gluten-sensitive enteropathy; autoimmune disease; sensitive enteropathy; autoimmune disease; sensitive enteropathy; inflammatory disease; submune-mediated skin disease; allergic disease; immunological disease; transplantediated skin disease; allergic disease; graft rejection; graft-versus-host-disease.
                               0; Gaps
  Human; immune related disease; diagnosis; antiinflammatory; cardiant;
  61 PHCEEKMVIITTKSVSRYRGQEHCLHPKLQSTKRFIKWYNAMNEKRRVYEE 111
   61 PHCEEKMVIITTKSVSRYRGQEHCLHPKLQSTKRFIKWYNAWNEKRRVYEE 111
                        0; Indels
100.0%; Pred. No. 8.9e-60;
tive 0; Mismatches 0;
  Human PRO273 protein UNQ240 SEQ ID NO:46.
   AAB33423 standard; protein; 111 AA.
  99WO-US008615.
99US-0131445P.
99US-0132371P.
99US-0134287P.
   99US-0123618P.
99US-0123957P.
99US-0125775P.
99US-0128849P.
  99WO-US028634.
99WO-US028634.
99WO-US028551.
99WO-US028564.
  3089.
506P.
  02-MAR-2000; 2000WO-US005841.
  99WO-US012252.
   99US-0141037P.
   99US-0144758P.
   99US-0146222P.
  99WO-US020944.
  99WO-US028214.
  99WO-US020111
  99WO-US020594
   99WO-US021547
   99WO-US028409
   29-JAN-2001 (first entry)
                        Matches 111; Conservative
  99WO-US02
   99US-0162
   99WO-US02
  30-SD66
Best Local Similarity
   WO200053758-A2.
  01-DEC-1999;
01-DEC-1999;
02-DEC-1999;
02-DEC-1999;
   Homo sapiens.
  20-APR-1999;
28-APR-1999;
04-MAY-1999;
14-MAY-1999;
02-JUN-1999;
  28-JUL-1999;
01-SEP-1999;
08-SEP-1999;
13-SEP-1999;
15-SEP-1999;
   15-SEP-1999;
05-OCT-1999;
29-OCT-1999;
29-NOV-1999;
   14-SEP-2000,
  12-APR-1999
  30-NOV-1999
  AAB33423;
   AAB 3423

AAB 3423

XXX

AAB 3423

XXX

XXX

XXX

XXX

XXX

XXX

AB 1000

AB 10000

AB 10000

AB 10000

AB 10000

AB 10000

AB 10000

AB 
  g
  ò
```

```
The present invention describes sixty four human PRO proteins which can be used in the treatment of immune related diseases. The human PRO proteins, anti-PRO antibodies, agonists and artagonists are useful for treating and diagnosing immune related disorders. The disorders are selected from systemic lupus erythemacosus, Thenmarotid archritis, selected from systemic lupus erythemacosus, Thenmarotid archritis, osteoarthritis, juvenile chronic arthritis, spondyloarthropathies, systemic vasculitis, sarcoidosis, autoimmune haemolytic systemic vasculitis, sarcoidosis, autoimmune haemolytic immune-mediated renal disease, demyelinating diseases of the central and periods systems, hepatobiliary diseases of the central and isease, greens, hepatobiliary diseases, inflammatory bowel disease, autoimmune mediated skin diseases, allergic diseases, immunological disease, fre lung, and transplantation associated diseases including graft rejection and graft-versus-host-disease, Aucesson to Aucesson cor human PRO sequences. AACS8379 to AACS8378 represent pument PRO polymucleotide and protein sequences given in the represent human PRO polymucleotide and protein sequences given in the exemplification of the present invention
  1 MSLLPRRAPPVSMRLLAAALLLLLLLALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKY 60
   1 MSILPRRAPPVSMRLLAAALLILLIALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKY 60
   Sixty four PRO polypeptides, useful in the diagnosis and treatment of immune related disorders, e.g. systemic lupus erythematosis, rheumatoid arthritis, osteoarthritis, thyroiditis and diabetes mellitus.
  Ashkenazi AJ, Baker KP, Goddard A, Gurney AL, Hebert C, Henzel W;
Kabakoff RC, Lu Y, Pan J, Pennica D, Shelton DL, Smith V;
Stewart TA, Tumas D, Watanabe CK, Wood WI, Yan M;
  Human; secreted protein; transmembrane protein; PRO; EST; cytostatic;
   0; Gaps
   61 PHCBEKMVIITTKSVSRYRGQEHCLHPKLQSTKRFIKWYNAWNEKRRVYBE 111
   Query Match
100.0%; Score 587; DB 3; Length 111;
Best Local Similarity 100.0%; Pred. No. 8.9e-60;
Matches 111; Conservative 0; Mismatches 0; Indels 0
  Human PRO273 (UNQ240) protein sequence SEQ ID NO:370.
   AAB44295 standard; protein; 111 AA.
  Claim 33; Fig 20; 309pp; English.
   05-JAN-2000; 2000WG-US000219.
06-JAN-2000; 2000WG-US000277.
06-JAN-2000; 2000WG-US000376.
11-FEB-2000; 2000WG-US004341.
18-FEB-2000; 2000WG-US004341.
18-FEB-2000; 2000WG-US004342.
                99WO-US030095,
99WO-US030999,
99WO-US031274,
   (GETH ) GENENTECH INC.
   WPI; 2000-572271/53.
N-PSDB; AAC58588:
  Sequence 111 AA;
                  16-DEC-1999;
20-DEC-1999;
30-DEC-1999;
  08-FEB-2001
  AAB44295;
EXEXEXE
  ò
   임
```

Human, secretory protein; membrane protein; vaccine; gene therapy; rheumatoid arthritis; diabetes.

Human membrane or secretory protein clone PSEC0212.

23-MAY-2001 (first entry)

AAB88478;

AAB88478 standard; protein; 111 AA.

RESULT 5 AAB88478

```
KP, Botstein D, Desnoyers L, Eaton DL; E. Fong S, Gao W, Gerber H, Gerritsen ME; PJ, Grimaldi CJ, Gurney AL, Hillan KJ; Wapier MA, Paoni NF, Roy MA, Shelton DL; Williams PM, Wood WI;
  Novel PRO polypeptides and polynucleotides used in detection methods, to target bloactive molecules to specific cells, and to modulate cellular activities.
expressed sequence tag; detection; cancer.
   Claim 12; Fig 149; 636pp; English.
   16-DEC-1999; 99WO-US030095.
30-DEC-1999; 99WO-US031243.
30-DEC-1999; 99WO-US031243.
60-JAN-2000; 2000WO-US000219.
60-JAN-2000; 2000WO-US000277.
66-JAN-2000; 2000WO-US000376.
   990S-0123957P
990S-0126773P
990S-0130232P
990S-013145P
990S-0141037P
990S-0141037P
990S-014569P
990S-016256F
  99WO-US028551.
99WO-US028565.
   18-FEB-2000; 2000WO-US004341
   Ashkenazi AJ, Baker KP, Br
Ferrara N, Filvaroff E, Fr
Goddard A, Goddwski PJ, Ga
KLjavin IJ, Kuo SS, Napien
Stewart TA, Tumas D, Will:
  (GETH ) GENENTECH INC.
  WPI; 2000-611443/58.
N-PSDB; AAC78551.
   Sequence 111 AA;
  WO200053756-A2
                   Homo sapiens.
   12-MAR-1999;
29-MAR-1999;
21-APR-1999;
28-APR-1999;
14-MAY-1999;
23-JUN-1999;
  26-JUL-1999;
29-OCT-1999;
30-NOV-1999;
02-DEC-1999;
02-DEC-1999;
  14-SEP-2000
```

Nucleic acids encoding secretory proteins/membrane proteins, useful in gene therapy or as candidate target molecules in drug development.

Claim 1; SEQ ID NO 324; 609pp + Sequence Listing; English.

Hayashi K;

Ota T, Isogai T, Nishikawa T, Kawai Y, Sugiyama T,

WPI; 2001-093989/11.

N-PSDB; AAF93905.

08-JUL-1999; 99JP-00194179. 11-JAN-2000; 2000JP-00118775. 02-MAY-2000; 2000JP-00183766.

(HELI-) HELIX RES INST.

07-JUL-2000; 2000EP-00114090.

EP1067182-A2. Homo sapiens.

.0-JAN-2001

```
AAC78458 to AAC78599 represent polynucleotide and EST (expressed sequence tag) sequences which encode secreted or transmembrane PRO polypeptides. The PRO polynucleotides and polypeptides have cytostatic activity. The polynucleotides and polypeptides can be used for detecting the presence of PRO polypeptides can be used for detecting the presence and for modulating biological activities of cells for specific targetide. The polypeptide targeting can be used to kill the traget cells, e.g. for the treatment of cancers. The polypeptide pairs provide specific targeting of bloactive molecules to cells. AAC78697 represent PCR primers and probes used in the isolation of the PRO polynucleotide sequences
   ö
  1 MSLLPRRAPPVSMRLLAAALLLLLLLALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKY 60
   1 MSLLPRRAPPVSWRLLAAAALLLLLALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKY 60
  0; Gaps
  PHCEEKMVIITTKSVSRYRGOEHCLHPKLOSTKRFIKWYNAWNEKRRVYEE 111
   PHCEEKAVIITTKSVSRYRGQEHCLHPKLQSTKRFIKWYNAWNEKRRVYBE 111
   Ouery Match
100.0%; Score 587; DB 3; Length 111;
Best Local Similarity 100.0%; Pred. No. 8.9e-60;
Matches 111; Conservative 0; Mismatches 0; Indels 0
  셤
```

8

8 g

```
This invention relates to nucleic acid sequences AAF93744 - AAF93916
which encode human secretory or membrane proteins represented by AAB88317
- AAB8499. Included in the invention are priners AAF93917 - AAF84955 and
AAF62222 - AAF62235 which are used to isolate the CDNA sequences of the
invention. The invention also includes methods for the production of
antibodies directed against the proteins, and CDNA sequences of the
invention. The invention also includes methods for the production of
antibodies directed against the proteins, and CDNA sequences, which can
be used in vaccines. The polymucleotide sequences can be used in gene
therapy. The polymucleotide sequences and the proteins they encode may be
the prevention, treatment and diagnosis of disasses associated
with inappropriate secretory protein/membrane protein expression. The
nucleic acids and complementary sequences may also be used as DNA probes
in diagnostic assays (e.g. polymerase chain reactions (PCR)) to detect
and quantitate the presence of similar nucleic acid sequences in samples.
They may also be used to study the expression and function of succious
polypeptides may be used as antigens in the production of antibodies
adainst them and in assays to identify modulators (agonists and
also be used as therapeutic agents to down requlate expression and
activity. The antibodies may also be used as diagnostic agents for
detecting the presence of the polypeptides in samples (e.g. by enzyme
linked immunosorbant assay (ELISA). Examples of diseases which may be
treated include rheumatoid arthritis and diabetes
  ô
   9
  9
   1 MSLLPRRAPPVSMRLLAAALLLLLLALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKY
  1 MSLLPRRAPPVSMRLLAAALLLLLLLALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKY
  0; Gaps
  61 PHCEEKAVIITTKSVSRYRQCHCLHPKLQSTKRFIKWYNAWNEKRRVYEE 111
  Query Match 100.0%; Score 587; DB 4; Length 111; Best Local Similarity 100.0%; Pred. No. 8.9e-60; Matches 111; Conservative 0; Mismatches 0; Indels
  Query Match
Best Local Similarity
   Sequence 111 AA;
ð
  g
  ઠે
```

Ŋ

```
The invention discloses a human Bolekine polypeptide, or its fragment. leukocytes play a important role in the immune response and the processes by which these cells move to their appropriate destination is critical. Chemokines are involved in leukocyte trafficking by mediating the expression of adhesion molecules on endothelial cells, producing chemoattractants, stimulate proliferation and regulate activation of specific cell types. The polynucleotide, polypeptide and antibodies raised against the polypeptide are useful for treating an immune related disorder in a mammal, such as systemic lupus erythematosus, arthritis, anglogenesis, systemic sclerosis, autoimmune haemolytic anaemia, thyroiditis, diabetes mellitus, renal disease, demyelinating disease of the central or peripheral nervous system, polyneuropathy, hepatitis,
  Human; Bolekine; leukocyte; immune response; chemokine; brolekine; adhesion; endothelial cell; chemoattractant; proliferation; activation; systemic lupus erythematosus; arthritis; angiogenesis; systemic sclerosis; autoimmune haemolytic anaemia; thyroiditis; diabetes mellitus; renal disease; demyelinating disease; thyroiditis; diabetes mellitus; renal disease; demyelinating disease; inflammatory bowel disease; autoimmune skin disease; alopecia; psoriasis; allergy; asthma; atopic dermatitis; food hypersensitivity; lung disease; stroke; encephalitis; multiple sclerosis; agonist; antagonist; T-lymphocyte; monouclear cell; ecsinophil; polymorphonuclear neutrophil; pwN; pluripotent cell; neuronal cell; MAP2; transgenic; therapeutic; gene therapy; tumour; neovascularisation.
  Novel Bolekine polypeptide useful for identifying agonist and antagonist of the polypeptide, and for treating immune related disorder, e.g. systemic lupus erythematosus and rheumatoid arthritis in a mammal.
61 PHCEEKMVIITTKSVSRYRGQEHCLHPKLQSTKRFIKWYNAWNEKRRVYEE 111
  Fong S, Goddard A, Hillan KJ, Roth I, Wood WI;
   /note= "N-myristoylation site"
  1. .34
/label= Signal_peptide
  Location/Qualifiers
  ABG70798 standard; protein; 111 AA.
  Claim 15; Fig 2; 63pp; English.
   03-NOV-1997; 97US-0064249P.
27-APR-1998; 98US-0083336P.
08-MAR-1999; 99WO-US005028.
18-FEB-2000; 2000WO-US0054341.
02-MAR-2000; 2000WO-US005841.
  22-MAR-2001; 2001US-00816920
  16-DEC-2002 (first entry)
   Human Bolekine protein.
   (GETH ) GENENTECH INC.
   WPI; 2002-740172/80.
   N-PSDB; ABS55212
  US2002119118-A1.
   Modified-site
   Homo sapiens
   29-AUG-2002
   ABG70798;
  Protein
   Peptide
```

```
primary biliary cirrhosis, inflammatory bowel disease, an autoimmune or immune-mediated skin disease, alopecia, psoriasis, allergic disease, asthma, atopic dermatitis, food hypersensitivity, immunologic disease of the lung, stroke, encephalitis and multiple sclerosis. The polypeptides and polynucleotides are also useful for identifying a compound (agonist or raisoposist) that inhibits the expression of activity of Bolekine, for diagnosing an immune related disease in a mammal, for modulating the proliferation of T-lymphocytes for enhancing the infiltration of infilmmatory cells (such as monounclear cells, eosinophils and polymorphomuclear neutrophils (PMNE)) into a tissue of a mammal and for inducing the differentiation of pluripotent cells into neuronal cells in a mammal, where the cells differentiate to a state such that neuronal markers (e.g. MAP2) are detected. The polymucleotides are also useful for generating transgenic or knock out animals which can be used in the cherapy, chromosome markers and diagnostically for tissue typing and for treating tumours by inhibiting the neovascularisation. The sequence presented is the human Bolekine protein
  ô
  9
   1 MSILPRRAPPVSMRILAAAILILILILALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKY 60
   Human, secreted and transmembrane protein, PRO, virucide, gene therapy, cell death, growth induction cascade, blood coagulation cascade, viral infection.
  1 MSILPRRAPPVSMRLLAAALLILLLALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKY
  0; Gaps
   61 PHCEEKMVIITTKSVSRYRGQEHCLHPKLQSTKRFIKMYNAWNEKRRVYEE 111
  61 PHCEEKMVIITTKSVSRYRGQEHCLHPKLQSTKRFIKWYNAWNEKRRVYEE 111
   Query Match
100.0%; Score 587; DB 5; Length 111;
Best Local Similarity 100.0%; Pred. No. 8.9e-60;
Matches 111; Conservative 0; Mismatches 0; Indels 0
   Novel human secreted and transmembrane protein PRO273.
   ABO25241 standard; protein; 111 AA
  9703-0064249P
9703-0065311P
9703-0065311P
9803-0077450P
9803-0077641P
9803-0077641P
9803-0077641P
9803-0077641P
9803-0077641P
9803-0077641P
9803-0077641P
9803-0077641P
   15-OCT-2001; 2001US-00978191
   (first entry)
  Sequence 111 AA;
   US2003050239-A1.
   Homo sapiens.
  11-MAR-1998;
11-MAR-1998;
11-MAR-1998;
   20-MAR-1998;
25-MAR-1998;
26-MAR-1998;
   09-SEP-2003
   10-MAR-1998;
   12-MAR-1998;
   13-MAR-2003
   13-NOV-1997;
  21-NOV-1997
   AB025241;
  ABO25241
ID ABO2
   RESULT 7
       ద
  ਨੇ
```

28-MAY-1998; 98US-0080420BP.
26-JUN-1998; 98US-00105413.
26-JUN-1998; 98US-001010P.
26-JUN-1998; 98US-001010P.
30-JUL-1998; 98US-0091359P.
31-SEP-1998; 98US-0091359P.
31-SEP-1998; 98US-001010P.
31-SEP-1998; 98US-0010038P.
31-SEP-1998; 98US-001038P.
31-SEP-1998; 98US-001038P.
32-NDC-1998; 98US-0010831P.
32-NDC-1998; 98US-0010831P.
32-DEC-1998; 98US-0010831P.
32-DEC-1999; 99US-0010831P.
32-DEC-1999; 99US-0026721P.
32-DEC

```
22-APR-1998
23-APR-1998
           0;
  Human; secreted and transmembrane protein; PRO; antiinflammatory; antiartisoslerctic; cardiant; anti-infertility; anti-HV; cytostatic; antidabetic; gene therapy; inflammatory disease; organ failure; atherosclerosis; cardiac injury; infertility; birth defect; premature aging; AIDS; cancer; diabetic complication; chromosome mapping; gene mapping; pharmaceutical; diagnostic; biosensor; bioreactor; tissue typing.
  9
  9
  1 MSLLPRRAPPVSMRLLAAALLLLLLALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKY
   1 MSLLPRRAPPVSMRLLAAALLLLLLALYTARVDGSKCKCSRKGPKIRYSDVKKLBMKPKY
   Gaps
  Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL,
Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME;
   PHCEEKMVIITTKSVSRYRGQEHCLHPKLQSTKRFIKMYNAWNEKRRVYEE 111
  PHCEEKWVIITTKSVSRYRGQEHCLHPKLQSTKRFIKMYNAWNEKRRVYEE 111
   ö
  Query Match
100.0%; Score 587; DB 6; Length 111;
Best Local Similarity 100.0%; Pred. No. 8.9e-60;
Matches 111; Conservative 0; Mismatches 0; Indels
   Novel human secreted and transmembrane protein PRO273.
   ABU72247 standard; protein; 111 AA
10-MAY-2001; 2001US-00854208.
10-MAY-2001; 2001WG-00854280.
25-MAY-2001; 2001WG-008517092.
01-JUN-2001; 2001WG-00874503.
01-JUN-2001; 2001US-00882636.
19-JUN-2001; 2001US-00886342.
29-JUN-2001; 2001WG-US019692.
29-JUN-2001; 2001WG-US021066.
09-JUL-2001; 2001WG-US021066.
09-JUL-2001; 2001WG-US021066.
  97US-0062250P.
97US-006424PP.
97US-006634PP.
98US-007450P.
98US-0077641P.
98US-0077641P.
98US-0077641P.
98US-0077641P.
98US-0077641P.
98US-0077641P.
98US-0077641P.
   24-OCT-2001; 2001US-00999832
  (first entry)
   (GETH ) GENENTECH INC.
  US2002192706-A1.
   11-MAR-1998;
11-MAR-1998;
11-MAR-1998;
12-MAR-1998;
13-MAR-1998;
  20-MAR-1998;
20-MAR-1998;
25-MAR-1998;
   Homo sapiens.
   13-NOV-1997;
21-NOV-1997;
10-MAR-1998;
  16-JUN-2003
  19-DEC-2002
   61
  ABU72247;
  Query Match
  A ABUT214 ABUT224 ABUT
     g
  dd
  ò
   à
```

```
PR 26-MAR-1999 98US-0079656P
PR 27-MAR-1999 9BUS-0079668P
PR 27-MAR-1999 9BUS-0079668P
PR 27-MAR-1999 9BUS-007968P
PR 27-MAR-1998 9BUS-007978P
PR 31-MAR-1998 9BUS-0079732P
PR 31-MAR-1998 9BUS-0080104P
PR 01-APR-1998 9BUS-0081019P
PR 01-APR-1998 9BU
```

```
The invention describes an isolated nucleic acid (1) comprising, or which is at least 80 % sequence identity to, or the full-length coding sequence of any of 118 300-2100 nucleotide sequences, which encodes its sequences, also given in the specification. The nucleic acids and polypeptides are useful for treating inflammatory diseases, organ failure, atherosclerosis, cardiac injury, infertility, birth defects, premature aging, AIDS, cancer, or diabetic complications. The nucleic acids and in generating antisense RNA or DNA. The polypeptides are useful as hybridisation probes, in chromosome and gene mapping, pharmaceuticals, diagnostics, biosensors or bioreactors. Both are useful as hybridisation probes, in chromosome and gene mapping, pharmaceuticals, diagnostics, biosensors or bioreactors. Both are useful as in tissue typing. This is the amino acid sequence of a novel human secreted and transmembrane PRO polypeptide
  J, Baker KP, Botstein D, Desnoyers L, Eaton DL; Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME; Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ; Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL; Tumas D, Williams PM, Wood WI;
   New secreted and transmembrane nucleic acids and polypeptides, designated as PRO, useful for treating inflammation, organ failure, atherosclerosis, cardiac injury, infertility, birth defects, premature aging, AIDS, or
  Claim 12; Fig 149; 453pp; English.
   Ferrara N, Filvaroff B
Goddard A, Godowski P.
Kljavin IJ, Kuo SS, 1
Stewart TA, Tumas D,
(GETH ) GENENTECH INC.
   WPI; 2003-328860/31.
   N-PSDB; ACA63773
  Ashkenazi AJ,
  cancer.
```

100.0%; Score 587; DB 6; Length 111; 100.0%; Pred. No. 8.9e-60; cive 0; Mismatches 0; Indels 0 Best Local Similarity 100. Matches 111; Conservative Sequence 111 AA; Query Match

ö

0; Gaps

1 MSLLPRRAPPVSMRLLAAALLLLLLALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKY 60 1 MSLLPRRAPPVSMRLLAAALLLLLLALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKY 60 61 PHCEEKWVIITTKSVSRYRGQEHCLHPKLQSTKRFIKWYNAWNEKRVYEB 111 61 PHCEEKWVIITTKSVSRYRGQEHCLHPKLQSTKRFIKWYNAWNEKRRVYEE 111 à 셤 ð B

ABB99340 standard; protein; 111 AA (first entry) 29-JAN-2003 RESULT 9
ABB9340
ARB99340
XXX
XXX
XXX
DDT 29-0
DT 29-0
XXX
XX Huma
XXX Huma
XX 
Amino acid sequence of Human Bolekine.

ö 9

> PHCEEKMVIITTKSVSRYRGQEHCLHPKLQSTKRFIKWYNAWNEKRRVYEE 111 PHCEERWYITTKSVSRYRGQEHCLHPKLQSTKRFIKWYNAWNEKRRVYEE 111

61 61

ઠે 셤

Human, Bolekine, T-lymphocyte proliferation, immune related disorder,

We systemic lupus erythematosis; rheumatoid arthritis, osteoarthritis,
idiopathic inflammatory myopathy; systemic systemic sterosis;
idiopathic inflammatory myopathy; Sjogren's syndrome;

Systemic vasculitis; sarcoidosis; autcimmune haemolytic anaemia;

We asculitis; sarcoidosis; autcimmune haemolytic anaemia;

We much emediated renal disease; demyelinating disease;

idiopathic demyelinating polyneuropathy; dislam-sarc syndrome;

Mepatitis; primary biliary cirrhosis; granulomatous hepatitis;

Mepatitis; primary biliary cirrhosis; granulomatous hepatitis;

Meclecosing cholangilis; inflammatory bowel disease;

Juten-sensitive enteropathy; Whipple's disease; skin disease;

Mutan-sensitive enteropathy; Whipple's disease; skin disease;

Mallergic rhinitis; aropic dermatitis; food hypersensitivity; urticaria;

Mallergic rhinitis; atopic dermatitis; food hypersensitivity; urticaria;

Mypersensitivity pneumonia; idiopathic pulmonary fibrosis;

Mypersensitivity pneumonitis; graft rejection; graft-versus-host disease;

The present sequence represents a human Bolekine polypeptide. Bolekine polypeptides are active stimulators of the proliferation of Transperides are active stimulators of the proliferation of Transperides and polymorleotides are useful for treating an immune related disocder e.g. systemic lupus erythematosis, rheumatoid arthritis, a steedarthritis, juvenile chronic arthritis, a prondyloarthropathy, systemic systemic vaculitis, sarcoidosis, autoimmune shamedytic ansemia, autoimmune thromoborytopsenia, attornamine chromoborytopsenia, attornamine demolytic ansemia, autoimmune thromoborytopsenia, attornamine demolytic ansemia, autoimmune thromoborytopsenia, attornamine demolytic ansemia, autoimmune thromoborytopsenia, and infectious of the central or peripheral nervous system, dispathic demyelinating polymeuropathy, dupperosing polymeuropathy, a hepatitis, primary circularis, or autoimmune chronic active hepatitis, primary disease, infectious or autoimmune chronic active hepatitis, whipple's inflammatory bowel disease, gluten-sensitive enteropathy, Whipple's disease, acthma, allergic rhinitis, atopic dermatitis, food disease, asthma, allergic rhinitis, atopic dermatitis, food chypersensitivity, urricaria, an immunologic disease, of the lung, consumpobility pneumonias, idiopathic pulmonary fibrosis, hypersensitivity pneumonias, idiopathic pulmonary fibrosis, hypersensitivity consumpation associated disease, graft rejection or graft-versus-short disease. The Bolekine polypeptides and encoding nucleic cof transgenic animal gene therapy, as molecular weight markers, New Bolekine polypeptides and encoding nucleic acids, useful for treating an immune related disorder such as systemic lupus erythematosis, rheumatoid arthritis, psoriasis, asthma, allergic rhinitis and atopic 1 MSLLPRRAPPVSMRLLAAALLLLLLALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKY 60 1 MSLLPRRAPPVSMRLLAAALLLLLLALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKY 0; Gaps 100.0%; Score 587; DB 6; Length 111; 100.0%; Pred. No. 8.9e-60; tive 0; Mismatches 0; Indels 0 Goddard A, Hillan KJ, Roth I, Wood WI; /note= "N-myristoylation site" chromosome identification and tissue typing . .34 'note= "signal peptide" Location/Qualifiers Claim 15; Fig 2; 96pp; English. 22-MAR-2001; 2001WO-US009552 22-MAR-2001; 2001WO-US009552 Matches 111; Conservative 80. .85 (GETH ) GENENTECH INC. 2003-018887/01. Local Similarity N-PSDB; ABV72423 Sequence 111 AA; WO200277028-A1 Modified-site Homo sapiens. gene therapy. 03-OCT-2002. Query Match Fong S, Peptide 셤 ઠ

```
Human; thrombolytic agent; interferon; interleukin; cytokine; erythropoietin; colony stimulating factor; cancer; colorectal carcinoma; appprosis related condition; AIDS; amyotrophic lateral soleroals; inflammatory disease; asthma; atherosclerosis; neurodegenerative disease; gastrointestinal disorder; Alzheimer's disease; Parkinson's disease; hypertension; myocardial ischaemia; kidney disease; carcinogenesis; plomerulonephritis; lung disease; pulmonary hypertension; precelampsia; bronchial asthma; gastric ulcer; renal failure; cardiovascular disease; inflammatory bowel disease; reproductive disorder; premature labour.
  Human secreted and transmembrane PRO polypeptide #3.
           ABU84927 standard; protein; 111 AA
  9705-0065311P
9705-0065311P
9705-0065311P
9805-0077532P
9805-0077649P
9805-00777649P
9805-00777649P
9805-0078886P
9805-0078886P
9805-0078836P
9805-0078836P
9805-0078936P
9805-0078936P
9805-0078936P
9805-0078936P
9805-0078936P
9805-0079950P
9805-0079728P
  15-OCT-2001; 2001US-00978192
  99WO-US005028
   99WO-US010733
99WO-US012252
  99US-00380137
99US-00380138
  99US-00265686
   99US-00267213
   99US-00380142
  12-AUG-2003 (first entry)
  US2002177553-A1.
  20. MAR. 1998;
20. MAR. 1998;
20. MAR. 1998;
25. MAR. 1998;
27. MAR. 1998;
27. MAR. 1998;
27. MAR. 1998;
27. MAR. 1998;
30. MAR. 1998;
30. MAR. 1998;
30. MAR. 1998;
60. NOV. 1998;
60. MAR. 1999;
61. MAR. 1999;
62. MAR. 1999;
63. MAR. 1999;
64. MAR. 1999;
65. MAR. 1999;
66. MAR. 1999;
  Homo sapiens.
   10-MAR-1998;
11-MAR-1998;
11-MAR-1998;
11-MAR-1998;
12-MAR-1998;
13-MAR-1998;
20-MAR-1998;
   28-NOV-2002
                                  ABU84927;
ABU84927
```

The invention relates to an isolated secreted and transmembrane polypeptide, designated as PRO polypeptide. The PRO polypeptide is useful in PRO polypeptide detection methods. The PRO polypeptide is useful linking a bioactive molecule to a call. The PRO polypeptide or an antibody against it is useful for modulating a biological activity of a cell. The PRO polypeptide is useful in industrial applications including pharmaceuticals, diagnostics, biosensors and bioreactors. The PRO polypeptide is also useful as a thrombolytic agent, interferon, previbropoletin, colony stimulating factor and other cytokines. The PRO polypeptide is useful for treating disease such as cancer e.g. colorectal carcinoms, apoptosis related conditions e.g. AIDS, amyotrophic lateral sclerosis; inflammatory disease e.g. asthma,

New isolated PRO polypeptides e.g. PRO213, PRO274 and PRO300, for use as pharmaceuticals, diagnostics, biosensors and bioreactors, for identifying modulators of receptor-ligand interactions.

WPI; 2003-328499/31. N-PSDB; ACA71937. Claim 12; SEQ ID NO 370; 55pp; English.

```
Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL;
Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gerritssen ME;
Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ;
Kljavin IJ, Kuo SS, Napier WA, Pan J, Paoni NF, Roy MA, Shelton DL;
Stewart TA, Tumas D, Williams PM, Wood WI;
        02-DEC-1999; 99W0-US028551.
02-DEC-1999; 99W0-US028551.
03-DEC-1999; 99W0-US028551.
04-DEC-1999; 99W0-US01243.
05-JAN-2000; 2000W0-US001219.
05-JAN-2000; 2000W0-US001219.
05-JAN-2000; 2000W0-US001219.
05-JAN-2000; 2000W0-US001219.
05-MAR-2000; 2000W0-US001219.
05-MAR-2000; 2000W0-US001219.
05-MAR-2000; 2000W0-US001219.
05-MAR-2000; 2000W0-US01219.
05-MAR-2000; 2000W0-US01219.
05-MAR-2000; 2000W0-US01219.
05-MAR-2000; 2000W0-US01219.
05-MAR-2000; 2000W0-US01219.
05-MAR-2001; 2000W0-US01219.
05-MAR-2001; 2000W0-US01219.
05-MAR-2001; 2001W0-US01219.
   2001WO-US021735,
2001US-00918585.
  (GETH ) GENENTECH INC.
  30-JUL-2001;
```

```
1 MSLLPRRAPPVSMRLLAAALLLLLLALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKY 60
   1 MSLLPRRAPPVSMRLLAAALLLLLLALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKY 60
                    Parkinson's disease, cardiovascular disease e.g. hypertension and myocardial ischaemia; kidney disease e.g. renal failure and glomerulonephritis; lung disease e.g. renal failure and asthma; gastrointestinal disease e.g. pulmonary hypertension, bronchial asthma; gastrointestinal disease e.g. pulmonary hypertension, bronchial bowel disease; reproductive disorders e.g. premature labour and preclampsia; reproductive disorders e.g. premature labour and preclampsia; carcinogenesis. The present sequence represents the amino acid sequence of a pRO polypeptide of the invention. Note: The sequence data for this patent did not form part of the printed specification but was obtained in electronic format directly from USPTO at
   0; Indels 0; Gaps
   Human, PRO polypeptide, secreted and transmembrane protein; fimune disorder; diabetes; hyper-insulinaemia; hyporinsulinaemia; cardiac insufficiency; nervous system disorder; kidney disorder; bone disorder; cartilage disorder; arthritis; tumour; wound healing; genetic disorder; cartilage disorder; anthritis; tumour; and healing; antiatthritic; anti-tumour; vulnerary; antianaemic; dermatological; cardiant.
   atherosclerosis; neurodegenerative disease e.g. Alzheimer's disease,
   61 PHCEEXWVIITTKSVSRYRGQEHCLHPKLQSTKRFIKWYNAWNEKRRVYEE 111
  PHCEEKMVIITTKSVSRYRGQEHCLHPKLQSTKRFIKWYNAWNEKRRVYEE 111
   100.0%; Score 587; DB 6; Length 111;
100.0%; Pred. No. 8.9e-60;
iive 0; Mismatches 0; Indels C
  ABU61125 standard; protein; 111 AA
  81US-00267213.
97US-0062260P.
97US-0065341P.
97US-00774420P.
98US-00774420P.
98US-0077441P.
98US-0077641P.
98US-0077641P.
98US-0077641P.
98US-0077649P.
98US-0077649P.
98US-0077649P.
98US-0077649P.
98US-0077649P.
98US-0077649P.
98US-0077649P.
98US-0077649P.
98US-0077649P.
98US-00789978.
98US-00789978.
98US-00789978.
  16-OCT-2001; 2001US-00978697
   (first entry)
   Best Local Similarity 100.
Matches 111; Conservative
   Human PRO273 polypeptide.
   US2002169284-A1.
  Sequence 111 AA;
   Homo sapiens.
  26-MAY-1981;
17-OCT-1997;
03-NOV-1997;
13-NOV-1997;
21-NOV-1997;
10-MAR-1998;
   26-MAR-1998;
27-MAR-1998;
27-MAR-1998;
  11-MAR-1998;
12-MAR-1998;
13-MAR-1998;
   08-MAY-2003
  14-NOV-2002.
  11-MAR-1998
   17-MAR-1998
  ABU61125;
  Query Match
Best Local &
   RESULT 11
  ABU6112
   THE SECTION OF THE SE
8899999999988888
   셤
  ò
```

```
The present invention relates to the isolation of novel human PRO polypeptides, and the polymuclectide sequences encoding them. The PRO polypeptides are secreted and transmembrane proteins. The PRO polypeptides are useful for detecting other PRO polypeptides, for modulating bloadcrive molecules to cells expressing PRO polypeptides, for modulating bloadcrive molecules are to cells expressing PRO polypeptides, and for for identifying agonists or antagonists. The bioactive molecule maybe a contribying agonists or antagonists. The bioactive molecule maybe a contribying agonists or antagonists. The bioactive molecule maybe a contriby radiologiabel or antibody, and causes apoptosis or death of the cell. The PRO polypeptides are useful for treating immune disorders, diabetes or hyper- or hypo-insulinaemia, cardiac insufficiency, nervous system disorders, kidney disorders, bone and cartilage disorders or arthritis, tumours, and wound healing. The polymoclectide sequences encoding PRO polypeptides are useful as hybridisation probes, in chromosome and gene mapping, in the generation of antisense RNA and DNA, in the preparation of PRO polypeptides, for generating transgenic animals or knockout animals, for the generating transgenic animals or knockout animals. For the generating transgenic animals or knockout and in gene the invention. Nate: The sequence data for this patent and part and onlypeptides of the invention. Nate: The sequence data for this patent and and an electronic format this properties of the invention. Nate: The sequence data for this patent and and an electronic format the intention the unsured and an electronic format the intention and the sequence data for this patent and and an electronic format the intention and the sequence data for this patent and and an electronic format the intention and the sequence data for this patent and the sequence and an electronic format and the sequence data for this patent and the sequence and   ò
Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ;
Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL;
Tumas D, Williams PM, Wood WI;
  1 MSLLPRRAPPVSMRLLAAALLLLLLLLLLALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKY 60
  Human; secreted protein; transmembrane protein; PRO; malignancy; cancer; ovarian cancer; colorectal cancer; sarcoma; leukaemia; lymphoma; inflammatory disease; necrosis; atherosclerosis; infertility; premature aging; psoriasis; inflammatory disease; renal disease; arthritis; immune-mediated alopecia; stroke; encephalitis; hepatitis; multiple sclerosis; gene therapy.
   1 MSLLPRRAPPVSMRLLAAALLLLLLALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKY 60
  0; Gaps
   Novel secreted and transmembrane polypeptides and polynucleotides encoding them useful for treating canear, kidney diseases, bone, cartilage disorders and immune deficiancies.
   PHCEEKMVIITTKSVSRYRGQEHCLHPKLQSTKRFIKMYNAWNEKRRVYEE 111
  PHCEEKWVIITTKSVSRYRGQEHCLHPKLQSTKRFIKWYNAWNEKRRVYEE 111
  Query Match 100.0%; Score 587; DB 6; Length 111; Best Local Similarity 100.0%; Pred. No. 8.9e-60; Matches 111; Conservative 0; Mismatches 0; Indels 0
   Human secreted/transmembrane protein PRO273,
Goddard A, Godowski PJ, Grimaldi J
Kljavin IJ, Kuo SS, Napier MA, Pa
Stewart TA, Tumas D, Williams PM,
   seqdata.uspto.gov/psipsDIDEntry.html
  ABU80394 standard; protein; 111 AA
  Claim 12; Fig 149; 459pp; English.
   15-OCT-2001; 2001US-00978189
   24-JUN-2003 (first entry)
   WPI; 2003-288163/28.
N-PSDB; ABX92577.
   Sequence 111 AA;
  US2003004102-A1.
  Homo sapiens
  ABU80394;
    ò
```

```
2000WO-US007532.
2000WO-US008439.
2000WO-US013705.
   9805-00040220
9805-0078886P
9805-0078936P
9805-0078938P
9805-0079658P
9805-0079668P
9805-0079668P
9805-007968P
9805-007968P
9805-007968P
9805-007968P
   98WO-US021141
98US-00184216
98WO-US024858.
98WO-US02054
98US-00202054
98US-0020806
  99WO-US012252
99US-00380137.
99US-00380142.
99WO-US028313.
99WO-US028551.
  98US-0077641P.
98US-0077649P.
98US-0077791P.
98US-0078004P.
   99WO-US005190.
99US-00267213.
99US-00284291.
99US-00311832.
99WO-US010733.
   2000WO-US005601,
2000WO-US005841,
2000WO-US006319.
   99WO-US005028.
99US-00265686.
  000WO-US014042.
97US-0062250P
  98US-0077632P
  000WO-US023328
   2000WO-US032678
   10-MAR-1999;
12-MAR-1999;
12-APR-1999;
  06-JAN-2000;
  35-JAN-2000;
  02-JUN-1999
  4-MAY-1999
```

```
20-DEC-2000; 2000US-00747259.
20-DEC-2000; 2000WO-US034956.
22-MAR-2001; 2001US-00816744.
22-MAR-2001; 2001US-0081652.
10-MAY-2001; 2001US-0081652.
10-MAY-2001; 2001WO-080652.
10-MAY-2001; 2001WO-0801092.
25-MAY-2001; 2001WO-0801092.
01-JUN-2001; 2001WO-US017800.
01-JUN-2001; 2001WS-00874503.
14-JUN-2001; 2001WS-00874503.
15-JUN-2001; 2001WS-0081692.
29-JUN-2001; 2001WS-0081692.
29-JUN-2001; 2001WS-0081696.
   (GETH ) GENENTECH INC.
```

Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL; Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME; Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ; Kljavin IJ, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL; Stewart TA, Tumas D, Williams PM, Wood WI;

## WPI; 2003-341189/32. N-PSDB; ACA66318.

New genes and secreted and transmembrane polypeptides (e.g. PRO337 or PRO1559), useful for treating or diagnosing e.g. cancers, atherosclerosis, infertility, stroke, encephalitis, hepatitis or multiple sclerosis in mammals.

# Claim 12; Fig 149; 460pp; English.

The invention relates to a new isolated nucleic acid molecule comprises a sequence with at least 80% identity to: (a) a nucleotide encoding any of 94 molecules whose sequences are fully defined in the specification; or the full length coding sequence of any these 94 collectide sequences. Also included are an isolated RNO polypeptide corring at least 80% positives when compared to any of the PRO polypeptide scoring at least 80% positives when compared to any of the PRO polypeptide scoring at least 80% positives when compared to any of the PRO polypeptide sequences cited above (or an isolated PRO polypeptide having at least 80% amino acid sequence identity to: (a) an amino acid sequence of encoded by the muclectide deposited with ATCC numbers listed in the specification; (b) the PRO polypeptide, and considered signal peptide, action of the PRO polypeptide, with or peptide or (c) an extracellular domain of the PRO polypeptide, with or acid molecule, a host cell comprising the vector (and producing a PRO polypeptide), a chimacsic molecule comprising the PRO polypeptide, action of sequence and an anti-PRO antibody. The PRO polypeptides or polypeptides or polymentedes are useful as pharmaceuticals, colorectal cancer, sarcoma leukaemia or lymphoma, inflammatory disease, necrosis, atherosclerosis, infertility, premature aging, portians.

Colorectal cancer, sarcoma leukaemia or lymphoma, inflammatory disease, necrosis, atherosclerosis, infertility, premature aging, portians.

Colorectal cancer, sarcoma leukaemia or lymphoma, inflammatory disease, restoned to servome the presence of these diseases. The PRO polypeptides are useful as molecular weight markers, or cancers (e.g. ovarian cancer, pro polypeptides are useful as hybridisation probes, or for also useful as molecular weight markers, or for chromsome cancer securing libraries of human collegial and polypeptides are useful as phycidisation of the presence of these diseases. The PRO polypeptides are useful as pholypeptides are beneful as pholypeptides are beneful as gene. The present sequence represents a PRO polypeptide

## Sequence 111 AA;

100.0%; Score 587; DB 6; Length 111; 100.0%; Pred. No. 8.9e-60; Query Match Best Local Similarity

```
ô
  Human, secreted and transmembrane protein; PRO; tissue typing; chromosome identification; vaccine; cancer; retinal disorder; sports-related joint disorder; osteoarthritis; rheumatoid arthritis; wound healing; obesity; diabetes; hearing loss; cardiac insufficiency disorder; kidney disorder; haemoglobin associated disorder.
                        9
   1 MSLLPRRAPPVSMRLLAAALLLLLLALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKY 60
                         1 MSLLPRRAPPVSMRLLAAALLLLLLLALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKY
0; Gaps
   61 PHCEEKMVIITTKSVSRYRGQEHCLHPKLQSTKRFIKMYNAWNEKRRVYEE 111
   61 PHCEBRWYIITTKSVSRYRGQEHCLHPKLQSTKRFIKWYNAMNEKRRVYEE 111
0; Indels
  Novel human secreted and transmembrane protein PRO273.
 Mismatches
   ADA24909 standard; protein; 111 AA.
 ;0
  97US-0064249P
97US-0066314P
97US-0066311P
98US-0077641P
98US-0077641P
98US-0077641P
98US-0077641P
98US-0077641P
98US-0077641P
98US-0077894P
98US-0078930P
98US-0078930P
98US-0078930P
98US-0079244P
98US-0079244P
98US-007923P
98US-007923P
98US-007923P
98US-007923P
98US-007932P
98US-0080128P
  16-OCT-2001; 2001US-00978564
   20-NOV-2003 (first entry)
 Matches 111; Conservative
  US2003050241-A1.
   Homo sapiens.
  11. MAR. 1998

11. MAR. 1998

12. MAR. 1998

13. MAR. 1998

13. MAR. 1998

20. MAR. 1998

27. MAR. 1998

28. MAR. 1998

29. MAR. 1998

31. MAR. 1998
  31-MAR-1998;
01-APR-1998;
01-APR-1998;
01-APR-1998;
01-APR-1998;
  08-APR-1998
  13-MAR-2003
  ADA24909;
   RESULT 13
   ADA24909
  В
   à
```

```
9804S - 0081817P - 9804S - 0081817P - 9804S - 0081812P - 9804S - 0081952P - 9804S - 0081952P - 9804S - 0081952P - 9804S - 0081952P - 9804S - 0082566P - 9804S - 0082566P - 9804S - 008256P - 9804S - 0083322P - 9804S - 0083322P - 9804S - 0083322P - 9804S - 0083322P - 9804S - 0083323P - 9804S - 0083323P - 9804S - 0083523P - 9804S - 00844614P - 9804S - 00844614P - 9804S - 0084640P - 9804S - 00853338P - 9804S - 008533
   99WC-US005190
99US-0123957P-
99US-0130232P-
99US-0131022P-
99US-0131445P-
99US-013428P-
99WG-0134287P-
   98WO-US024855
98US-0113296P.
98US-0113621P.
99WO-US000106.
15-APR-1998;
15-APR-1998;
15-APR-1998;
15-APR-1998;
22-APR-1998;
22-APR-1998;
22-APR-1998;
22-APR-1998;
22-APR-1998;
23-APR-1998;
29-APR-1998;
21-APR-1998;
31-APR-1998;
32-APR-1998;
32-APR-1998;
32-APR-1998;
32-APR-1998;
32-APR-1998;
32-APR-1998;
32-APR-1998;
32-APR-1998;
32-APR-1998;
   28-MAY-1998;
26-JUN-1998;
26-JUN-1998;
01-JUL-1998;
30-JUL-1998;
   11-SEP-1998,
07-OCT-1998,
20-NOV-1998,
20-NOV-1998,
22-DEC-1998,
05-JAN-1999,
^{8} ^{8}
```

```
Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL;
Perrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gerriteen WE;
Goddard A, Godowski EJ, Grimaldi JC, Gurney AL, Hillan KJ;
Kljavin IJ, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL;
Stewart TA, Tumas D, Williams PM, Wood WI;
   New isolated PRO polypeptides for example extracellular, secreted and membrane bound proteins, useful for modulating the biological activities of cells and for treating, for example diabetes, cancer, rheumatoid arthritis, and hearing loss.
02-JUN-1999, 99W0-US012252.
16-JUN-1999, 99U6-0141037FP.
23-JUN-1999, 99U6-0141037FP.
24-JUL-1999, 99U6-014569BP.
28-JUL-1999, 99U6-014569BP.
28-JUL-1999, 99U6-014569BP.
29-OCT-1999, 99U6-014569BP.
20-DEC-1999, 99W0-US028113.
02-DEC-1999, 99W0-US028113.
02-DEC-1999, 99W0-US028113.
02-DEC-1999, 99W0-US0208113.
02-DEC-1999, 99W0-US031243.
03-JAN-2000, 2000W0-US00129.
05-JAN-2000, 2000W0-US00129.
06-JAN-2000, 2000W0-US001319.
11-FEB-2000, 2000W0-US001319.
11-FEB-2000, 2000W0-US001319.
11-FEB-2000, 2000W0-US001319.
11-FEB-2000, 2000W0-US001319.
11-MAR-2000, 2000W0-US0014941.
02-MAR-2000, 2000W0-US014941.
02-JUN-2000, 2000W0-US0314956.
03-JUN-2000, 2000W0-US0314956.
04-AUC-2000, 2000W0-US0314956.
04-AUC-2000, 2000W0-US0314956.
04-AUC-2000, 2000W0-US0314956.
04-AUC-2000, 2000W0-US0314956.
05-JUN-2001, 2001W0-US031952.
01-JUN-2001, 2001W0-US031965.
03-JUN-2001, 2001W0-US031966.
09-JUL-2001, 2001W0-US031735.
  (GETH ) GENENTECH INC.
  WPI; 2003-521814/49.
N-PSDB; ADA24908.
```

The invention describes an isolated secreted and transmembrane (PRO) polypeptide in a sample, and vice versa. PRO725, PRO700 and PRO4993 useful for detecting PRO1993 are useful for detecting PRO725, PRO700 and PRO159 are useful for detecting PRO725, PRO700 and PRO199 is useful for detecting PRO725, PRO700 and PRO739 in a sample, and PRO4993 is useful for linking a bioactive molecule to a cell expressing a PRO4993 polypeptide. Thinking a bioactive molecule to a cell expressing a PRO4999 polypeptide. PRO1559 is useful for linking a bioactive molecule to a cell expressing a PRO4999 polypeptide. PRO1559 is useful for linking a bioactive molecule to a cell expressing a PRO739 Claim 12; Fig 149; 461pp; English.

0; Gaps Query Match
100.0%; Score 587; DB 6; Length 111;
Best Local Similarity 100.0%; Pred. No. 8.9e-60;
Matches 111; Conservative 0; Mismatches 0; Indels C

```
98US-0081955P

98US-0082568P

98US-0082700P

98US-0082700P

98US-008270P

98US-0083338P

98US-0083338P

98US-0083338P

98US-0083338P

98US-0083348P

98US-0083348P

98US-0083348P

98US-008348P

98US-008348P

98US-008348P

98US-008348P

98US-008348P

98US-008348P

98US-008348P

98US-008348P

98US-00848P

98US-0085333P

98US-0085333P

98US-0085333P

98US-0085332P

98US-0085333P

  98WO-US024855.
98WG-US024855.
98WG-U113296P.
98WG-U113621P.
99WG-US000106.
99WG-US005028.
  9903-0123957P.
9903-0126773P.
9903-0130232P.
9903-0131022P.
   99WO-US010733.
99WO-US012252.
99US-0139557P.
99US-0141037P.
   29-APR-1998;
29-APR-1998;
29-APR-1998;
29-APR-1998;
29-APR-1998;
29-APR-1998;
   29-APR-1998;
30-APR-1998;
30-APR-1998;
06-MAY-1998;
07-MAY-1998;
07-MAY-1998;
07-MAY-1998;
07-MAY-1998;
07-MAY-1998;
07-MAY-1998;
07-MAY-1998;
  07. MAX. 1998;
13. MAX. 1998;
13. MAX. 1998;
15. MAX. 1998;
18. MAX. 1998;
18. MAX. 1998;
22. MAX. 1998;
  22 MAY - 1998

22 - MAY - 1998

28 - MAY - 1998

26 - JUN - 1998

11 - SEP - 1998

11 - SEP - 1998

20 - NOV - 1998

20 - NOV - 1998

20 - NOV - 1998
   12-MAR-1999;
29-MAR-1999;
21-APR-1999;
  Human, secreted and transmembrane protein, PRO, cell death, neuropathy, peripheral neuropathy, diabetic peripheral neuropathy;
AIDS-associated neuropathy, Charcot-Marie-Tooth disease,
Refusum's disease, Aberalipoproteinaemis, Tangier disease,
Krabbe's disease, Metadhromatic leukodystrophy, Fabry's disease,
Dejerine-Sottas syndrome; chromosome mapping; gene mapping; gene therapy.
            9
1 MSLLPRRAPPVSMRLLAAALLILLALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKY
                           PHCBEKMVIITTKSVSRYRGQEHCLHPKLQSTKRFIKMYNAMNEKRRVYEE 111
  Novel human secreted and transmembrane protein PRO273.
  ABO19696 standard; protein; 111 AA
  970S-0062250P
970S-006624P
970S-006634P
980S-0077641P
980S-0077641P
980S-0077641P
980S-0077641P
980S-0077641P
980S-007889B
980S-007889B
980S-007893B
980S-007893B
980S-0079663P
980S-0079663P
980S-0079663P
980S-0079663P
980S-0079663P
980S-0079663P
980S-007963P
980S-007963P
980S-007963P
980S-007963P
980S-0080107P
  2001US-00978403
  (first entry)
   US2003050240-A1.
   Homo sapiens.
   16-OCT-2001;
   30 MAR-1998
31 MAR-1998
31 MAR-1998
31 MAR-1998
01 MAR-1998
01 ARR-1998
01 ARR-1998
01 ARR-1998
01 ARR-1998
01 ARR-1998
08 ARR-1998
  08-SEP-2003
  13-MAR-2003
  17-0CT-1997
   ABO19696;
                            61
  61
                            à
```

```
61 PHCEEKMVIITTKSVSRYRGQEHCLHPKLQSTKRFIKMYNAWNEKRRVYEE 111
   US2003055216-A1.
   Homo sapiens.
   20-MAR-2003
   ADA12570;
  Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL; Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gerriteen ME; Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ; Kljavin IJ, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL; Stewart TA, Tumas D, Williams PM, Wood WL;
  The invention describes an isolated, secreted and transmembrane prolygeptide, termed FPC Dolygeptide (1). (1) is useful for detecting PRO493. PRO337, PRO1559, PRO702, PRO700 or PRO739 polypeptide, and for linking a bioactive molecule to a cell expressing the above polypeptides. The bioactive molecule is a toxin, radiolabel or an antibody and causes cell death. (1) is useful as therapeutic agent, in medical and industrial applications e.g. for treating neuropathy, especially peripheral meuropathy, dibactic peripheral enuropathy, AIDS associated neuropathy, Charcot-Marie-Tooth disease, Refusum's disease, Abetalipoproteinaemia, Tangier disease, Krabbe's disease, Metachromatic leukodystrophy, Fabry's
  Novel secreted and transmembrane polypeptide for modulating biological activity of cell expressing the polypeptide, identifying agonists or antagonists of polypeptide, and as molecular weight markers.
   Ouery Match
100.0%; Score 587; DB 6; Length 111;
Best Local Similarity 100.0%; Pred. No. 8.9e-60;
Matches 111; Conservative 0; Mismatches 0; Indels 0; Gaps
  Claim 12; Fig 149; 459pp; English.
   16-DEC-1999; 99WO-US031243.
30-DEC-1999; 99WO-US031243.
30-DEC-1999; 99WO-US031244.
65-JAN-2000; 200WO-US000219.
06-JAN-2000; 200WO-US000219.
06-JAN-2000; 200WO-US000376.
11-FEB-2000; 200WO-US000376.
   24 FEB-2000, 2000MC-US005004.

20 MAR-2000, 2000MC-US005004.

10 MAR-2000, 2000MC-US005841.

21 MAR-2000, 2000MC-US005841.

22 MAR-2000, 2000MC-US00839.

17 MAY-2000, 2000MC-US013705.

22 MAY-2000, 2000MC-US014941.

30 MAY-2000, 2000MC-US014941.

30 MAY-2000, 2000MC-US01254.

28 JUL-2000, 2000MC-US01328.

24 AUG-2000, 2000MC-US02328.

26 DEC-2000, 2000MC-US023388.
  22-MAR-2001; 2001WO-US009552.
25-MAY-2001; 2001WO-US017092.
01-UTN-2001; 2001WO-US017090.
20-UTN-2001; 2001WO-US021066.
29-UTN-2001; 2001WO-US021066.
30-UTL-2001; 2001US-00918585.
   99WO-US028313.
99WO-US028551.
99WO-US028565.
99WO-US030095.
99WO-US031243.
             99US-0145698P.
99US-0146222P.
99US-0162506P.
  (GETH ) GENENTECH INC.
  WPI; 2003-503575/47.
  N-PSDB; ACD29919.
```

```
inflammatory disease; organ failure; atherosclerosis; cardiac injury; infertility; birth defect; premature aging; AIDS; cancer; diabetic complication; tissue typing; human.
61 PHCEEKMVIITTKSVSRYRGQEHCLHPKLQSTKRFIKWYNAMNEKRRVYEE 111
   Human secreted/transmembrane polypeptide PRO273.
  ADA12570 standard; protein; 111 AA
   96US-0018049P.
97US-0062250P.
97US-006221P.
97US-0065311P.
98US-0077632P.
98US-0077641P.
98US-0077641P.
98US-0077641P.
98US-0077641P.
98US-0077641P.
98US-0077641P.
98US-0077641P.
98US-0077612P.
98US-007964P.
98US-007964P.
98US-007964P.
98US-007964P.
98US-007964P.
98US-007964P.
98US-007964P.
98US-007964P.
98US-0080134P.
98US-0080134P.
98US-0080134P.
98US-0080134P.
98US-0080134P.
98US-0080134P.
98US-00801165P.
98US-00801165P.
98US-00801170P.
98US-00801170P.
98US-00801170P.
98US-00801170P.
98US-00801170P.
98US-00801170P.
98US-00801170P.
98US-00801170P.
  17-OCT-2001; 2001US-00978824
   06-NOV-2003 (first entry)
   21-APR-1998;
21-APR-1998;
22-APR-1998;
```

0

셤 à

```
98US-0082704P

98US-0082704P

98US-0082392P

98US-00833236P

98US-00833236P

98US-00833236P

98US-00833236P

98US-00833236P

98US-00833236P

98US-00833236P

98US-00833238P

98US-00833238P

98US-00833238P

98US-00833238P

98US-0083338P

98US-00833
22-APR-1998

22-APR-1998

23-APR-1998

24-APR-1998

25-APR-1998

29-APR-1998

29-APR-1998

29-APR-1998

29-APR-1998

29-APR-1998

29-APR-1998

30-APR-1998

30-APR-1999

   ^{8}
```

```
0; Gaps
   Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL;
Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME.
  Query Match
Best Local Similarity 100.0%; Pred. No. 8.9e-60;
Matches 111; Conservative 0; Mismatches 0; Indels
14-MAY-1999; 99US-00311832.

14-MAY-1999; 99US-0134287P.

14-MAY-1999; 99US-0134287P.

15-JUN-1999; 99US-0139557P.

25-JUN-1999; 99US-0139557P.

25-JUN-1999; 99US-0139557P.

25-JUN-1999; 99US-0146698P.

25-JUN-1999; 99US-0146698P.

25-JUN-1999; 99US-0142680P.

25-JUN-1999; 99US-0146698P.

26-JUN-1999; 99US-0146698P.

27-JUN-2000; 99US-016506P.

28-JUN-2000; 2000WO-US01274.

28-JUN-2000; 2000WO-US01376.

28-JUN-2001; 2001WS-008162.

29-JUN-2001; 2001WS-008162.

20-JUN-2001; 2001WS-008165.

21-JUN-2001; 2001WS-008165.
  (GETH ) GENENTECH INC
  61
     3
   8 8
   ò
```

. 0 9 9

Search completed: April 22, 2004, 12:32:25 Job time : 58 secs us-09-978-189-370.rspt

```
GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
```

OM protein - protein search, using sw model

April 22, 2004, 12:29:47; Search time 40 Seconds (without alignments) 875.563 Million cell updates/sec Run on:

US-09-978-189-370 587

1 MSLLPRRAPPVSWRLLAAAL.....TKRFIKWYNAWNEKRRVYEE 111 Title: Perfect score: Sequence:

Scoring table: BLOSUM62 Gapop 10.0 , Gapext 0.5

1017041 seqs, 315518202 residues Searched:

Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

SPTREMBL\_25:\*
1: Sp\_archea:\*
2: Sp\_bacteria:\*
3: Sp\_tungl:\*
4: Sp\_tungl:\*
5: Sp\_tungl:\*
5: Sp\_tungl:\*
5: Sp\_mannal:\*
6: Sp\_mhc:\*
6: Sp\_mhc:\*
7: Sp\_phage:\*
7: Sp\_phage:\*
7: Sp\_nhage:\*
7: Sp\_nhage:\* p\_virus:\*
c\_vertebrate:\*
c\_unclassified:\* sp\_rvirus:\*
sp\_bacteriap:\*
sp\_archeap:\* sp\_plant:\*
sp\_rodent:\* Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

| 099460<br>0802FP5<br>0802FP4<br>040350<br>09170B4<br>09170B2<br>09170B2<br>09171B2<br>09171B2<br>0817B2<br>0817B2<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>0817B3<br>08 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 126<br>126<br>1266<br>1266<br>1113<br>1113<br>1113<br>1103<br>1104<br>1104<br>1106<br>1106<br>1106<br>1106<br>1106<br>1106                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 88888888888444444444444444444444444444                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

#### ALIGNMENTS

ò

g ò

full-length cDNA clones from mouse brain cDNA library

```
SEQUENCE
  Query Match
  Q91V02
Q91V02;
  Matches
   RESULT 4
091002
ID 09100
AC 09100
DT 01-DI
DT 01-DI
셤
  ö
  1 MRILIAAAALLILILALCASRVDGSKCKCSRKGPKIRYSDVKKLEMKPKYPHCEEKWVIITT 60
   13 MRLLAAALLLLLLALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKYPHCEEKMVIITT 72
  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
  0; Gaps
  01-00T-2000 (TrEMBLrel. 15, Created)
01-00T-2000 (TrEMBLrel. 15, Last sequence update)
01-00T-2003 (TrEMBLrel. 24, Last sequence update)
01-0TN-2003 (TrEMBLrel. 24, Last annocation update)
B call and mononoxte-activating chemokine precursor (Brain cDNA, clo MNCb-6413, similar to Mns musculus kidney-expressed chemokine CXC (Kec) mRNA) (Kec) (1200006123Rik protein) (Small inducible cytokine
   Sleeman M.A., Fraser J.K., Murison J.G., Kelly S.L., Prestidge R., Watson J.D., Kumble K.D.,
"B cell and monocyte-activating chemokine (BMAC), a novel non-BLR alpha chemokine.";
   Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus
PHCEEKMVIITTKSVSRYRGQEHCLHPKLQSTKRFIKWYNAWNEKRRVYEE 111
                                PHCBEKAVIITTKSVSRYRGQEHCLHPKLQSTKRFIKWYNAWNEKRRFYEE 111
   STRAIN=CS7BL;
Osada N., Kusuda J., Tanuma R., Ito A., Hirata M., Sugano S.,
Hashimoto K.;
   Score 507; DB 11; Length 99;
Pred. No. 3.4e-50;
  2; Indels
   FRAIN-Wistar,
Han G.D., Koike H., Shimizu F., Kawachi H.,
Han G.D., Roike H., Shimizu F., Kawachi H.,
Submitted (FEB-2002) to the EMBL/GenBank/DDBJ databases.
EMBL, AF488948; AAM74057.1;
GO; GO:000575; C:extracellular; IEA.
GO; GO:000595; P:chemokine activity; IEA.
GO; GO:000595; P:immune response; IEA.
InterPro; IPR001811; Chemokine_ILB.
Fram, FP00048; ILB, 1.
SEQUENCE 99 AA; 11730 MW; 972C06336C7F46D6 CRC64;
   Submitted (APR-1999) to the EMBL/GenBank/DDBJ databases
   73 KSVSRYRGQEHCLHPKLQSTKRFIKWYNAWNEKRRVYEE 111
   61 KSMSRYRGQEHCLHPKLQSTKRFIKWYNAWNEKRRVYEE 99
   01-0CT-2002 (TrEMBLrel. 22, Created)
01-0CT-2002 (TrEMBLrel. 22, Last sequence update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
  99 AA
  2; Mismatches
   subfamily B).
CXCL14 OR SCYB14 OR BMAC OR 1200006123RIK.
  PRT;
   PRT;
   ch
1 Similarity 96.0%;
95; Conservative
   PRELIMINARY;
  PRELIMINARY;
  Rattus norvegicus (Rat).
  Mus musculus (Mouse).
   Query Match
Best Local Similarity
   SEQUENCE FROM N.A.
  SEQUENCE FROM N.A.
  SEQUENCE FROM N.A.
  NCBI_TaxID=10116;
  NCBI_TaxID=10090;
  STRAIN=BALB/CBYJ;
   09JHH7
  RESULT 2
28K453
10 20 8K41
AC 28K41
AC 28K41
DT 01-0
D
   RESULT 3
OUT-09
OUT-09
OUT-09
OUT-09
OUT-09
OUT-01-09
OU
   셤
   gg
   à
  ð
```

```
C STRAIN=CSTBL/61, TISSUB=Body;

X MEDLINE=22354683; PubMed=12466851;

X The FANTON Consortium,

A The FANTON Consortium,

A the RIKEN Genome Exploration Research Group Phase I & II Team;

A The RIKEN Genome Exploration Research Group Phase I & II Team;

A The RIKEN Genome Exploration Research Group Phase I & II Team;

A Malysis of the mouse transcriptome based on functional annotation of 60,70 full-length coNRs.";

B MBL; AROHAGES 573 (2002).

B MBL; AROH4615; BAA59509.1; ---

B MBL; AROH4615; BAA59409.1; ---

B MBL; AROH4615; BAA53411.1; ---

B MBL; AROH4615; BAA5411.1; ---

B MGD; AG01005576; C:extracellular; IEA.

GO; GO:0005576; C:extracellular; IEA.

GO; GO:0006955; P:immune response; IEA.

R InterPro; IPR091811; Chemokine_ILB.
   Arakawa T., Hara A., Filbata K., Yoshino M., Itoh M., Ishii Y., Arakawa T., Hara A., Filbata K., Yoshino H., Adachi J., Pukuda S., Arakawa T., Hara A., Fukunishi Y., Konno H., Adachi J., Pukuda S., Aizawa M., Nishi K., Tkiyosawa H., Kondo S., Yamanaka I., Saito T., Okazaki Y., Gojobori T., Bono H., Kasukawa T., Saito R., Katota K., Matsuda H.A., Ashburner M., Baralov S., Casavant T., Ruchi P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J., Schriml L.M., Staubli F., Suzuki R., Tomita M., Wagner L., Washio T., Sakriml L.M., Staubli F., Suzuki R., Tomita M., Wagner L., Washio T., Blake J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F., Brownstein M.J., Bult C., Fletcher C., Fujita M., Gariboldi M., Ausonstein M.J., Markinan J., Markina J., Markinan J., Markina J., Sakamoto N., Suzuki H., Toyo-oka K., Schoenbach C., Shibata Y., Storch K.-F., Wynshaw-Boris A., Yoshida K., Hasegawa Y., Kawaji H., Kohtsuki S., M. Wankirake
  13 MRLLAAALLILLILLIALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKYPHCEEKMVIITT 72
  1 MELLAAALLILILIALCASRVDGSKCKCSRKGPKIRYSDVKKLEMRPKYPHCEERWNIVTT
   Gaps
   Hayashizaki Y.; "Functional annotation of a full-length mouse cDNA collection."; Nature 409:685-690(2001).
   ;
   POTENTIAL.
B CELL AND MONONCYTE-ACTIVATING
   86.2%; Score 506; DB 11; Length 99; 94.9%; Pred. No. 4.4e-50;
   2; Indels
made by oligo-capping method.";
Submitted (APR-2000) to the EMBL/GenBank/DDBJ databases.
   97352E91FF7F46D6 CRC64;
  73 KSVSRYRGQEHCLHPKLQSTKRFIKWYNAWNEKRRVYEE 111
  61 KSMSRYRGGEHCLHPKLQSTKRFIKWYNAWNEKRRVYEE 99
   (TrEMBLrel. 19, Created)
(TrEMBLrel. 19, Last sequence update)
(TrEMBLrel. 24, Last annotation update)
   3; Mismatches
   SEQUENCE FROM N.A.
STRAIN=CS7BL/6J; TISSUB=Embryo, and Lung;
MEDLINE=21085660; PubMed=11217851;
   CHEMOKINE.
   99 AA; 11716 MW;
   Conservative
   PRELIMINARY;
   Local Similarity
   SEQUENCE FROM N.A.
   7
7
7
   01-DEC-2001
01-DEC-2001
01-JUN-2003
```

ò

9

us-09-978-189-370.rspt

63 NVSRFKGQEYCLHPRLQSTRNLVKWFKIWKDKHRTFE 99

```
PRT;
   Pfam; PF00048; IL8; 1.
PRINTS; PR00437; SMALLCYTKCXC.
  Jun-suppressed chemokine.
  60; Conservative
  PRELIMINARY;
  PRELIMINARY;
  Gallus gallus (Chicken)
  Query Match
Best Local Similarity
   SEQUENCE FROM N.A.
TISSUE=Fibroblast;
   NCBI_TaxID=10116;
   NCBI_TaxID=9031;
  01-MAR-2001
01-OCT-2003
  01-MAR-2001
  Q9DGL8
  09EP62
   Gallus
  RESULT 6
   Q9DGL8
   Q9EP62
   SO ON THE PROPERTY OF THE PROP
  ò
   DE RECOCCOS ON THE PROPERTY OF   ઠે
   ò
  ö
  1 AAALLILLALCASRVDGSKCKCSRKGPKIRVSDVKKLBMKPKYPHCEEKOVIVTIKSMS 60
   17 AAALLILLILALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKYPHCBEKMVIITTKSVS 76
  14 RLLAAALLILLIALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKYPHCEEKMVIITTK 73
   3 RCSTAALPLAVIAVYSLNTEAYKCRCTRKGPKIRYIDVQKLEIKPYGPSCRMIFVTNE 62
   0; Gaps
  0; Gaps
   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes;
Cyprinidae; Danio.
NCBI_TaxID=7955;
MIP2gamma (Fragment).
Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
   MEDLINE-20480374; PubMed=11025222;
Long Q., Quint E., Lin S., Ekker M.;
Long Q., Quint E., Lin S., Ekker M.;
Long A., Quint E., Lin S., Ekker M.;
distinctive expression patterns in the vestibulo-acoustic system distinctive expression patterns in the vestibulo-acoustic system Mch. bev. 97:183-186(2000).

EMBL; AF279919; AAG09819.1; ...
EMBL; AF279919; AAG09819.1; ...
GO; GO:0005576; C:extracellular; IEA.
GO; GO:0005576; P:chemokine activity; IEA.
GO; GO:0006555; P:immune response; IEA.
InterPro; IPRO01811; Chemokine ILB.
SEQUENCE 100 AA; 12016 MW; Z74BE255A74F98B5 CRC64;
  Query Match 57.1%; Score 335; DB 13; Length 100; Best Local Similarity 54.6%; Pred. No. 1.6e-30; Matches 53; Conservative 25; Mismatches 19; Indels (
   83.1%; Score 488; DB 11; Length 95; 94.7%; Pred. No. 4.8e-48; ive 3; Mismatches 2; Indels
  STRAIN=CS7BL/6J; TISSUE=Placenta;
Schilderink N., Geerts D.;
Schilderink N., Geerts D.;
Schilderink N., Geerts D.;
Schilderink N., Geerts D.;
Submitted (FEB-2001) to the EMBL/GenBank/DDBJ databases.
EMBL; AF352784; AAK52902.1; -..
EMBL; AF352785; AAK52903.1; -..
EMBL; AF352785; AAK52903.1; -..
GO; GO:00005976; C:extracellular; IEA.
GO; GO:00006955; P:immune response; IEA.
InterPro; IPR001811; Chemokine_ILB.
Pfam; PF00048; ILB; 1.
   95 AA; 11202 MW; EA9DOF5A7CA64F1C CRC64;
  01-MAR-2001 (TrEMBLrel. 16, Created)
01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
  74 SVSRYRGOEHCLHPKLOSTKRFIKWYNAWNEKRRVYE 110
  77 RYRGOEHCLHPKLQSTKRFIKWYNAWNEKRRVYEE 111
  61 RYRGQEHCLHPKLQSTKRFIKWYNAWNEKRRVYEE 95
   Brachydanio rerio (Zebrafish) (Danio rerio).
   PRT; 100 AA.
  Best Local Similarity 94.7
Matches 90; Conservative
   PRELIMINARY;
   CXC-type chemokine.
  SEQUENCE FROM N.A.
   SEQUENCE FROM N.A.
   NCBI_TaxID=10090;
   SEQUENCE
   Query Match
  Query Match
  Q9DFG4
O9DFG4;
   SCYBA.
   RESULT 5
       셤
  8
   g
   셤
  ઠે
   ઠ
  8
```

```
13 MRLLAAALLILLIALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKYPHCEEKMVIITT 72
  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
  SEQUENCE FROM N.A. SEQUENCE FROM N.A. STREAMS AND SEQUENCE FROM N.A. STREAMS STREAMS WISTERS TISSUES PERITODEAL CAVITY;
SHIDATA F., KONISHI K., NAKAGAWA H.;
Shibata F., Konishi K., Nakagawa H.;
"Gene structure, CDNA cloning, and expression of rat cytokine-induced neutrophil chemoattractant 2 (GRO/CINC-2) gene.";
Cytokine 10:169-174(1998).
EMBL, D87926; BAB12280.1;
HSSP; P10889; IMIZ.
   OSEP62;
01-MAR-2001 (TrEMBLrel. 16, Created)
01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
CINC-2 alpha precursor.
Rattus norvegicus (Rat).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae, Rattus.
   3; Gaps
   Hartl M., Bister K.;
"Supression of genes in jun-transformed avian fibroblasts.";
"Supression of genes in jun-transformed avian fibroblasts.";
Submitted (JUL-2000) to the EMEL/GenBank/DDBJ databases.
EMBL, AF2B5876; A4400529.1; -
GO, GO:0006576; C:extracellular; IEA.
GO; GO:0006909; F:chemokine activity; IEA.
GO; GO:0006955; P:immune response; IEA.
InterPro; IPR001B11; Chemokine ILB.
SEQUENCE 98 AA; 11564 MW; 30D88E540AADD35B CRC64;
  54.9%; Score 322.5; DB 13; Length 98; 60.0%; Pred. No. 4.1e-29; Live 19; Mismatches 18; Indels 3;
   73 KSVSRYRG-QEHCLHPKLQSTKRFIKWYNAWNEKRRVYEE 111
  61 --WIKVRGEQOHCLNPKRONTVRLLKWYRVWKEKGRVYEE 98
(TremBirel. 16, Created)
(TremBirel. 16, Last sequence update)
(TremBirel. 25, Last annotation update)
  PRT; 101 AA.
   GO: GO:000576; C:extracellular, IEA.
GO: GO:0008009; F:chemokine activity; IE
GO: GO:0006955; P:immune response; IEA.
InterPro; IPR00181; Chemokine IEB.
InterPro; IPR001899; CXC_chmkine_smll.
```

69 HCAQTEVIATLKS-----GQEACLNFAAPMVKKFLQ 99

유

```
'n,
  8 APPVSMRLLAAALLLLLLLLATARVDGS-----KCKCSRKGPKIRYSDVKKLEMKPKY 60
  2 APP-TRRILIMAALLILILIMATSHQPSGTVVARELRCQCLKTLPRVDFENIQSLTVTPPG 60
   8 APPVSMRLLAAALLLLLLLLLYTARVDGS-----KCKCSRKGPKIRYSDVKKLEMKPKYP 61
  9 AAPSGPRFLRTAMLILLLAASRRAAGAAALTELRCQCLQTVQGIHLKSIQSLKVLSPGP 68
   "Cloning of two rabbit GRO homologues and their expression in alveolar
   SEQUENCE FROM N.A.
STRAIN-NEW ZEALAND WHITE;
Yoshimura T., Modi W.S.;
"Isolation of novel GRO genes, and a phylogenetic analysis of the CXC chemokine subfamily in mammals.";
Submitted (MAR-1997) to the EMBL/GenBank/DDBJ databases.
   Query Match 24.4%; Score 143.5; DB 11; Length 101; Best Local Similarity 35.1%; Pred. No. 1.3e-08; Matches 34; Conservative 19; Mismatches 31; Indels 13; Gaps
  Johnson M.C., Goodman R.B. II, Kajikawa O., Wong V.A., Mongovin S.M.,
Martin T.R.;
   Query Match 21.9%; Score 128.5; DB 6; Length 108;
Best Local Similarity 33.3%; Pred. No. 7e-07;
Matches 32; Conservative 15; Mismatches 38; Indels 11; Gaps
  Oryctolagus cuniculus (Rabbit).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Lagomorpha; Leporidae; Oryctolagus.
   macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";

macrophages.";
   SIĞNAL 1 32 POTENTIAL.
CHAIN 33 101 CINC-2 ALPHA.
SEQUENCE 101 AA; 11109 MW; D949D5712FE30909 CRC64;
   01-NOV-1996 (TrEMBLrel. 01, Created)
01-AUG-1999 (TrEMBLrel. 11, Last sequence update)
01-UTN-2003 (TrEMBLrel. 24, Last annotation update)
GRO (Permeability factor 2).
  61 PHCEEKWVIITTKSVSRYRGQEHCLHPKLQSTKRFIK 97
   61 PHCTQTEVIATLKD-----GGEVCLNPQAPRLQKIIQ 92
   62 HCEEKMVIITTKSVSRYRGQEHCLHPKLQSTKRFIK 97
SMART; SM00199; SCY; 1.
PROSITE; PS00471; SMALL_CYTOKINES_CXC; 1.
   SEQUENCE OF 43-108 FROM N.A.
STRAIN=NEW ZEALAND WHITE;
MEDLINE=95129889; Pubmed=7828903;
   PRELIMINARY;
  NCBI_TaxID=9986;
  Signal.
SIGNAL
  028724;
  028724
   84
   qq
      몺몺XEFS
   à
```

```
8 APPVSMRLIAAALLLLLLLALYTARVDGS-----KCKCSRKGPKIRYSDVKKLEMKPKYP 61
  2 APATRPLIRAAALILILILAA-SRQTTGAPVANELRCQCLQTWAGVHFKNIQSLKVTPPGP 60
  12; Gaps
   Sigmodon hispidus (Hispid cotton rat).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Sigmodontinae,
   Sigmodon hispidus (Hispid cotton rat).
Eukaryota, Metazoa, Chordata; Craniata, Vertebrata, Euteleostomi;
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Sigmodontinae,
  Page 200 of the control of the contr
  Query Match
21.8%; Score 128; DB 11; Length 100;
Best Local Similarity 32.3%; Pred. No. 7.3e-07;
Matches 31; Conservative 21; Mismatches 32; Indels 12
   Blanco J.C., Pletneva L.M., Prince G.A.;
"Sigmodon hispidus Cytokines, chemokines and interferons.";
"Sigmodon hispidus Cytokines, chemokines and interferons.";
"Submitted (OCT-2001) to the BMBL/GenBank/DDBJ databases.

EMBL; AYOS9408; AALZ6705.1; -.
GO; GO:0008576; C:extracellular; IEA.
GO; GO:0008009; F:chemokine activity; IEA.
GO; GO:0006955; P:mmune response; IEA.
InterPro; IRR001081; Chemokine ILB.
InterPro; IRR001089; CXC_chmkine_smll.
  SMART, SMUOLSY, SLY, 1906

SEQUENCE, 100 AA, 10686 MW, B357C8C6F002057C CRC64;
   01-DEC-2001 (TrEMBLrel. 19, Created)
01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-DEC-2003 (TrEMBLrel. 19, Last annotation update)
Growth.regulated protein.
   01-DEC-2001 (TrEMBLrel. 19, Created)
01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-UTN-2003 (TrEMBLrel. 24, Last annotation update)
Macrophage inflammatory protein-2.
   62 HCEEKMVIITTKSVSRYRGQEHCLHPKLQSTKRFIK 97
   61 HCTQTEVIATLKN-----GQEACLNPEAPMVQKIVQ 91
   PRT; 100 AA.
  PRT; 101 AA.
  PRELIMINARY;
   PRELIMINARY;
  SEQUENCE FROM N.A.
   SEQUENCE FROM N.A.
   NCBI_TaxID=42415;
   NCBI_TaxID=42415;
   Q91Z64
Q91Z64;
   0912K9
RESULT 9
Q912K9
ID Q912
  RESULT 10
  Q91Z64
   셤
   à
  ò
```

us-09-978-189-370.rspt

```
Mammalia, Butheria, Primates, Catarrhini, Cercopithecidae,
Cercopithecinae, Macaca.
NCBI_TaxID=9544;
   62 HCEEKMVIITIKSVSRYRGQEHCLHPKLQSTKRFIK 97
   76 SRYRGQEHCLHPKLQSTKRFIKWYNAWNEKR 106
   68 ---GAGKKCLNPESEFTKKYI---TAALEKR 92
   InterPro; IPR001811; Chemokine ILB.
InterPro; IPR001089; CXC_chmkine_smll.
Pfam; PF00048; ILB; 1.
   Ictalurus punctatus (Channel catfish).
  PRT;
  PRELIMINARY;
   SEQUENCE FROM N.A.
  SEQUENCE FROM N.A.
  NCBI_TaxID~7998;
   Chemokine.
  SEQUENCE
  Q7T0B3
  RESULT 14
098TQ2
  RESULT 13
        g
  ò
   g
   g
   ð
   ద
   ð
  ઠ
   7
  8 APPVSMRLLAAALLLLLLLLLLALYTARVDGS-----KCKCSRKGPKIRYSDVKKLEMKPKYP 61
  2 APTISLFLRSAMLLLLLLVATHRQATGAVLATELRCQCVKTLQRIDFKTIQSLKVTPPGP 61
  8 APPVSMRLLAAALLLLLLLALYTARVDGS-----KCKCSRKGPKIRYSDVKKLEMKPKYP 61
  Query Match
21.6%; Score 126.5; DB 11; Length 101;
Best Local Similarity 31.2%; Pred. No. 1.1e-06;
Matches 30; Conservative 21; Mismatches 34; Indels 11; Gaps
  ch 20.7%; Score 121.5; DB 6; Length 107; Similarity 33.3%; Pred. No. 4.4e-06; Indels 11; Gaps 32; Conservative 15; Mismatches 38; Indels 11; Gaps
  N SEQUENCE FROM N.A.
A Basu S., Schaefer T.M., Ghosh M., Fuller C.L., Reinhart T.A.;
Basu S., Schaefer T.M., Ghosh M., Fuller C.L., Reinhart T.A.;
T. "Comprehensive cloning and sequencing reveals evolutionary
conservation among all groups of rhesus macaque chemokines.";
Submitted (NOV-2001) to the EMBL/GenBank/DDBJ databases.
REDL, AR49280, ANN76084.1;
RED, AR49280, ANN76084.1;
RED, GO:0005576; C:extracellular; IEA.
RO; GO:0005576; C:extracellular; IEA.
RO; GO:0005509; F:chemokine activity; IEA.
RO; GO:000555; P:immune response; IEA.
RITCEPERO; IPR001891; Chemokine_ILB.
RITCEPERO; IPR001089; CXC_chmkine_smll.
  Eukaryota; Mecazoa; Chordata; Cranlata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Cercopithecidae; Cercopithecinae; Macaca.
  01-MAR-2003 (TrEMBLrel. 23, Created)
01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
01-MAR-2003 (TrEMBLrel. 25, Last annotation update)
Chemokine (XCL3/GRO-gamma.
Macaca malatta (Rhesus macaque).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
  PERMI, PF00048; ILB; 1.
PRINTS; PR00437; SYALLCYTKCXC.
SMART; SM00199; SCY; 1.
SRO0411; SNALL CYTOKINES CXC; 1.
SEQUENCE 107 AA; 11355 MW; CDDC2F86449923C4 CRC64;
  PROSITE, PS00471; SMALL CYTOKINES CXC; 1.
SEQUENCE 101 AA; 11018 MW; PCIC5F36A8C2A443 CRC64;
  01-MAR-2003 (TrEMBLrel. 23, Created)
01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
   62 HCTQTEVIATLKN-----GQDVCLNPEAPLVQKIIQ 92
  62 HCEEKMVIITTKSVSRYRGQEHCLHPKLQSTKRFIK 97
  62 HCEEKWIITIKSVSRYRGQEHCLHPKLQSTKRFIK 97
   68 HCAETEVIATIKN-----GQKACLNPASPMVQKIIK 98
   107 AA.
   PRT; 107 AA.
   PRT;
   Chemokine CXCL1/GRO-alpha.
Macaca mulatta (Rhesus macaque).
   Pfam; PF00048; ILB; 1.
PRINTS; PR00437; SMALLCYTKCXC.
SMART; SM00199; SCY; 1.
   PRELIMINARY;
   PRELIMINARY;
   Local Similarity
   Query Match
  Query Match
   QBHXZ3;
  Q8HXZ4
   Q8HXZ3
   Matches
   RESULT 11
   RESULT 12
  g
   OSBERE
   쉱
  ò
  d
  ò
```

```
8 AAPSNPRLLRVALLLLLVATGRRATGAPVATELRCQCLQTLQGIHPKNIQSVIVKAPGP 67
  1 ACLLIVHVQQQARTSVRRCLC--QGPAANGVRLQRIDKIEIHPASATCENKEIIVILKN- 67
   8 APPVSMRLLAAALLLLLLALYTARVDGS-----KCKCSRKGPKIRYSDVKKLEMKPKYP 61
  19 ALLLLLLALYTARVDGSKCKCSRKGPK---IRYSDVKKLEMKPKYPHCEEKWVIITTKSV 75
  Baoprasertkul F., Peatman E., Kucuktas H., Li P., He C., Chen L., Simmons M., Liu Z., "Differential Expression Profiles of Chemokine CXCLIO in Resistant and Susceptible Catfish after Infection of Edwardsiella Ictaluri."; Submitted (JUL-2003) to the EMBL/GenBank/DDBJ databases.

EMBL; AY335950; AAQ01586.1; -.
  Ouery Match
17.0%; Score 100; DB 13; Length 95;
Best Local Similarity 31.9%; Pred. No. 0.0011;
Matches 29; Conservative 17; Mismatches 33; Indels 12; Gaps
   11; Gaps
  Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Siluriformes;
Ictaluridae; Ictalurus.
Basu S., Schaefer T.M., Ghosh M., Fuller C.L., Reinhart T.A.;
"Comprehensive cloning and sequencing reveals evolutionary
conservation among all groups of rhesus macaque chemokines.";
Submitted (NOV-2001) to the EMEL/GenBank/DDBJ databases.

GO; GO:0005576; C:extracellular; IEA.
GO; GO:000809; F:chemokine activity; IEA.
GO; GO:000809; F:immune response; IEA.
  DB 6; Length 107;
   Query Match
20.4%; Score 119.5; DB 6; Length 1
Best Local Similarity 33.3%; Pred. No. 7.4e-06;
Matches 32; Conservative 16; Mismatches 37; Indels
  PRINTS; PRO0437; SMALLCYTKCXC.
SMART; SMO0193; SCY, 1.
PROSITE; PS00471; SMALL.
SEQUENCE 107 AA; 11294 MW; ES999836BC523EBD CRC64;
  95 AA; 10340 MW; EB5CF92D3070DD58 CRC64;
  01-0CT-2003 (TrEMBLrel. 25, Created)
01-0CT-2003 (TrEMBLrel. 25, Last sequence update)
01-0CT-2003 (TrEMBLrel. 25, Last annotation update)
```

```
9
  11 VSWRLLAAALLLLLLALYTARVDGS-----KCKC----SRKGPKIRYSDVKKLEMKP 58
   SEQUENCE FROM N.A.
Laing K.J., Zou J.J., Hirono I., Aoki T., Secombes C.J.;
Laing K.J., Zou J.J., Hirono I., Aoki T., Secombes C.J.;
"Identification and analysis of the interleukin 8 molecule in rainbow
"Irout Oncorhynchus mykiss.";
Submitted (FEB-2001) to the EMBL/GenBank/DDBJ databases.
  in rainbow
  .
0.0022;
ches 25; Indels 23; Gaps
  SEQUENCE FROM N.A. MEDLINE=22642999; PubMed=12695860; Fujiki K., Gauley J., Bols N.C., Dixon B.; "Genomic cloning of novel isotypes of the rainbow trout interleukin-
  Oncorhynchus mykiss (Rainbow trout) (Salmo gairdneri).
Bukaryoda; Meteazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Buteleostei;
Protacanthopterygii; Salmoniformes; Salmonidae; Oncorhynchus.
  Š
  "Molecular cloning of a rainbow trout (Oncorhynchus mykiss) C
chemokine by use of suppression subtractive hybridization.";
Submitted (JAN-2001) to the EMBL/GenBank/DDBJ databases.
   Score 97.5; DB 13; Length 97;
Pred. No. 0.0022;
  SEQUENCE FROM N.A.
Laing K.J., Zou J.J., Hirono I., Aoki T., Secombes C.J.;
Laing K.J., Zou J.J., Hirono I., Aoki T., Secombes C.J.;
"Identification and analysis of the interleukin 8 molecule
"International mykiss.";
  trout Oncorhynchus mykiss.";
Submitted (SEP-2000) to the EMBL/GenBank/DDBJ databases.
   23 97 PUTATIVE CXC CHEMOKINE. 97 AA; 10777 MW; 4EEB35A4EF9DACE2 CRC64;
  59 KYPHCEEKMVIIT-TKSVSRYRGQEHCLHPKLQSTKRFIK 97
   56 PSSHCRDTEIIATLSKS-----GQEICLDVSAPWVRVIE 90
                            098TQ2,
01-UDN-2001 (TrEMBLrel. 17, Created)
01-UDN-2001 (TrEMBLrel. 17, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
Interleukin-8 (Putative cxc chemokine precursor).
   16.6%; Scc. No. 0.0. 34.0%; Pred. No. 0.0. 4.0%; Mismatches C. 4.0
97 AA
   GO; GO:0005576; C:extracellular; IEA.
GO; GO:0008009; F:chemokine activity; IEA.
GO; GO:0006955; P:immune response; IEA.
InterPro; IPRO01811; Chemokine_ILB.
Pfam; PF00048; ILB; 1.
  POTENTIAL.
   Immunogenetics 55:126-131(2003).
EMBL, AJ79069, CAC33585.1;
EMBL, AJ300835; CAC45065.1;
EMBL, AJ310565; CAC43945.1;
EMBL, AY160982, AAC25641.1;
EMBL, AY160984; AAC25643.1;
EMBL, AY160984; AAC25643.1;
EMBL, AY160986; AAC25643.1;
PRT:
   Sangrador-Vegas A., Smith T.J.;
  34; Conservative
PRELIMINARY;
  22
  Query Match
Best Local Similarity
  SEQUENCE FROM N.A.
  NCBI_TaxID=8022;
   SEQUENCE
   Signal.
SIGNAL
SOLUTION AND THE SERVICE SERVI
  g
  8
  유
   à
```

RESULT 15 Q7SX73

```
9
  11 VSMRLLAAALLLLLLALYTARVDGS-----KCKC----SRKGPKIRYSDVKKLEMKP 58
  1 MSIR-MSASLVVVLLALLTITEGMSLRGMGADLRCRCIETESRRIGKL----IKKVEMPP 55
   23; Gaps
  SEQUENCE FROM N.A.
PubMed=12695860;
Fujiki K., Gauley J., Bols N.C., Dixon B.;
"Genomic cloning of novel isotypes of the rainbow trout interleukin-
  Oncorhynchus mykiss (Rainbow trout) (Salmo gairdneri).
Bukaryota: Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Actinopterygli; Neopterygli; Teleostei; Buteleostei; Protacanthopterygli; Salmoniformes; Salmonidae; Oncorhynchus.
   16.1%; Score 94.5; DB 13; Length 97; 33.0%; Pred. No. 0.0048; tive 19; Mismatches 25; Indels 23
   EMBL; ÄY160981; AAO25640.1; -.
EMBL; AY160987; AAO25646.1; -.
EMBL; AY201022; AAP42829.1; -.
SEQUENCE 97 AA; 10749 MW; 4EEB2A99EF9DACE2 CRC64;
  59 KYPHCEEKMVIIT-TKSVSRYRGQEHCLHPKLQSTKRFIK 97
  56 PSSHCRDTEIIATLSKS-----GQEICLDVSAPWVKKVIE 90
                                  01-OCT-2003 (TrEMBLrel. 25, Created)
1-OCT-2003 (TrEMBLrel. 25, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
Interleukin-8 (Interleukin 8X).
97 AA.
  Search completed: April 22, 2004, 12:33:47 Job time : 42 Becs
PRT;
   Immunogenetics 55:126-131(2003).
   1 Similarity 33.0% 33; Conservative
  PRELIMINARY;
   Query Match
   Local
   Matches
  a
  ð
  ઠે
```

```
(without alignments)
260.476 Million cell updates/sec
  1 MSLLPRRAPPVSMRLLAAAL.......TKRFIKWYNAWNEKRRVYEE 111
  April 22, 2004, 12:31:18 ; Search time 22 Seconds
   Issued Patents AA:*

(GGDZ 6/ptodata/2/iaa/5A_COMB.pep:*
(GGDZ 6/ptodata/2/iaa/5B_COMB.pep:*
(GGDZ 6/ptodata/2/iaa/6A_COMB.pep:*
(GGDZ 6/ptodata/2/iaa/6B_COMB.pep:*
(GGDZ 6/ptodata/2/iaa/6B_COMB.pep:*
(GGDZ 6/ptodata/2/iaa/PUTUS COMB.pep:*
(GGDZ 6/ptodata/2/iaa/packfilesL.pep:*
GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
   Total number of hits satisfying chosen parameters:
   389414 segs, 51625971 residues
   Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
  OM protein - protein search, using sw model
   BLOSUM62
Gapop 10.0 , Gapext 0.5
  US-09-978-189-370
587
   Minimum DB seq length: 0 Maximum DB seq length: 2000000000
  Perfect score:
   Scoring table:
   Database :
   Sequence:
  Searched:
  Run on:
```

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Sequence 2, Appli Sequence 2, Appli Sequence 3, Appli Sequence 3, Appli Sequence 344, Appli Sequence 68, Appli 344, App 340, App 394, App 417, App 417, App 346, App 346, App 346, App 346, App 346, App 346, App 423, App 4, Appli 146, App 2, Appli 4, Appli 4, Appli Appli Description Sequence Seguence Sequence US-08-825-55A-2 US-09-238-184-2 US-09-238-184-3 US-09-188-184-3 US-09-188-184-3 US-09-182-283-344 US-09-312-283-346 US-09-312-283-346 US-09-312-283-346 US-09-312-283-346 US-09-312-283-346 US-09-312-283-346 US-09-312-283-346 US-09-312-283-345 US-08-825-55A-4 US-08-825-55A-4 US-08-825-55A-4 US-08-825-58A-4 US-08-825-33-45 SUMMARIES Query Match Length DB Score 143.5 143.5 143.5 138 138 444444 222222 888444 Result

|                 |                 |                 |                 |                  |                  |                 |                 | ,               |                 |                  |                 |                  |                 |                    |                    |                  |                 |
|-----------------|-----------------|-----------------|-----------------|------------------|------------------|-----------------|-----------------|-----------------|-----------------|------------------|-----------------|------------------|-----------------|--------------------|--------------------|------------------|-----------------|
| App1i           | Appli           | Appli           | Appli           | Appli            | Appli            | Appli           | Appli           | Appli           | Appli           | Appli            | Appli           | Appli            | App1i           | 4, App             | 3, App             | Appli            | Appli           |
| 4,              | ý               | 4,              | ģ               | 4,               | 7,               | 7               | 'n              | 7               | 'n              | 7                | 9               | 7                | 6               | 42                 | 148                | 'n               | 'n              |
| Sequence        | Sequence        | Sequence        | Sequence        | Sequence         | Sequence         | Sequence        | Sequence        | Sequence        | Seguence        | Seguence         | Sequence        | Sequence         | Sequence        | Sequence           | Sequence           | Sequence         | Sequence        |
| US-08-862-607-4 | US-08-468-819-6 | US-09-203-235-4 | US-09-213-383-6 | PCT-US95-16144-4 | US-08-352-324A-7 | US-08-862-607-7 | US-08-468-819-5 | US-09-203-235-7 | US-09-213-383-5 | PCT-US95-16144-7 | US-08-812-003-9 | US-08-649-006A-7 | US-09-771-023-9 | US-09-312-283C-424 | US-08-679-493A-148 | US-08-352-324A-5 | US-08-862-607-5 |
| 7               | N               | m               | 4               | Ŋ                | ч                | N               | N               | ო               | 4               | 'n               | N               | 4                | 4               | 4                  | 4                  | Н                | 77              |
| 107             | 107             | 107             | 107             | 107              | 107              | 107             | 107             | 107             | 107             | 107              | 71              | 96               | 96              | 96                 | 106                | 106              | 106             |
| 21.9            | 21.9            | 21.9            | 21.9            | 21.9             | 20.0             | 20.0            | 20.0            | 20.0            | 20.0            | 20.0             | 19.3            | 18.9             | 18.9            | 18.9               | 18.6               | 18.2             | 18.2            |
| 128.5           | 128.5           | 128.5           | 128.5           | 128.5            | 117.5            | 117.5           | 117.5           | 117.5           | 117.5           | 117.5            | 113             | 111              | 111             | 111                | 109                | 107              | 107             |
| 28              | 29              | 30              | 31              | 32               | 33               | 34              | 35              | 36              | 37              | 38               | 39              | 40               | 41              | 42                 | 43                 | 44               | 45              |
|                 |                 |                 |                 |                  |                  |                 |                 |                 |                 |                  |                 |                  |                 |                    |                    |                  |                 |

### ALIGNMENTS

```
TESULT 1

US-08-85-556A-2

Sequence 2, Application US/0882556A

Patent No. 53913A1.

APPLICANT: Ni, Jian

APPLICANT: One LY Reiner L.

APPLICANT: One Control on Control one Control on Co
```

Query Match 99.1%; Score 582; DB 2; Length 111; Best Local Similarity 99.1%; Pred. No. 1.4e-63; Matches 110; Conservative 0; Mismatches 1; Indels 0; Gaps 1 MSLLPRRAPPVSMRLLAAALLLLLLALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKY 60

ઠે

```
ö
1 MSLLPRRAPPVSMRLLAAALLILLLALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKY 60
  1 MSLLPRRAPPVSMRLLAAALLLLLLALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKY 60
  1 MSLLPRRAPPVSMRLLAAALLLLLLALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKY 60
   0; Gaps
  61 PHOBEKMVIITTKSVSRYRGQEHCLHPKLQSTKRFIKWYNAWNEKRRVYEE 111
   61 PHCEENWVIITTKSVSRYRGQEHCLHPKLQSTKRFIKWYNAWNEKRRFYEE 111
   61 PHCEEKMVIITTKSVSRYRGQEHCLHPKLQSTKRFIKMYNAWNEKRRVYEE 111
  61 PHCEEKAVIITTKSVSRYRGQEHCLHPKLQSTKRFIKWYNAWNEKRRFYEE 111
  Query Match 99.1%; Score 582; DB 4; Length 111; Best Local Similarity 99.1%; Pred. No. 1.4e-63; Matches 110; Conservative 0; Mismatches 1; Indels
  E: Sterne, Kessler, Goldstein & Fox, P.L.L.C.
1100 New York Ave., Suite 600
   CONTEXT: USA
ZIP: 20005-2934
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/238,184
  sequence 2, Application US/09238184
Patent No. 6479633
Patent No. 6479633
Patent No. 6479633
PAPLICANT: Ni, Jian
APPLICANT: Gentz, Reiner L.
APPLICANT: Li, Haddong
TITLE OF INVENTION: Chemokine Alpha 2
NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
ADDRESSEE: Sterne, Kessler, Goldstein
   1488.0850001
  CLASSIFICATION:
PRIOR APPLICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/825,556
FILING DATE: 19-MAR-1996
APPLICATION NUMBER: US 60/013,653
FILING DATE: 19-MAR-1996
ATTOWNEY/AGENT INFORMATION:
NAME: Steffe, Bric K.
REGISTRATION NUMBER: 36,688
REFERENCE/DOCKET NUMBER: 36,688
REFERENCE/DOCKET NUMBER: 1408.085000
TELEPHONE: 202.371-2600
  TELEFAX: 202-371-2540
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
  LENGTH: 111 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
  Washington
  US-09-238-184-2
   US-09-238-184-2
  STREET:
   ò
   a
   셤
   à
  g
   ठे
```

Sequence 3, Application US/08825556A Patent No. 5910431

US-08-825-556A-3

GENERAL INFORMATION:

```
1 MRILAAALILILIALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKYPHCEKMVIITT 60
   13 MRLLAAALLLLLLLLLALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKYPHCEEKMVIITT 72
  Query Match

88.9%; Score 522; DB 2; Length 99;
Best Local Similarity 99.0%; Pred. No. 2.66-56;
Matches 98; Conservative 0; Mismatches 1; Indels
   SSEE: Sterne, Kessler, Goldstein & Fox, P.L.L.C. : 1100 New York Ave., Suite 600 Washington
   3: Sterne, Kessler, Goldstein & Fox, P.L.L.C.
1100 New York Ave., Suite 600
   CONTINE REARABLE FORM:

COMPUTER REARABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/825,556A

FLING DATE: 19-MAR-1997

CLASSIFICATION DATA:

APPLICATION NUMBER: US 60/013,653

FLING DATE: 19-MAR-1996

ATONNEY/AGENT INPORMATION:

NAME: SLEFF SECTION NUMBER: 36,688

REGISTRATION NUMBER: 36,688

REGISTRATION NUMBER: 36,688

REGISTRATION NUMBER: 36,688

REGISTRATION NUMBER: 36,688

REFERENCE/POCKET NUMBER: 1488.0850011

TELECOMMUNICATION:

  73 KSVSRYRGQEHCLHPKLQSTKRFIKWYNAWNEKRVYEE 111
  61 KSVSRYRGQEHCLHPKLQSTKRFIKWYNAWNEKRRFYBE 99
APPLICANT: Ni, Jian
APPLICANT: Gentz, Reiner L.
APPLICANT: Su, Jeffrey Y.
APPLICANT: Li, Haodong
APPLICANT: Li, Haodong
TITLE OF INVENTION: Chemokine Alpha 2
NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
ADDRESSE: Sterne, Kessler, Goldstein
STREET: 1100 New York Ave., Suite 600
   APPLICANT: Ni, Jian
APPLICANT: Ni, Jian
APPLICANT: Gentz, Reiner L.
APPLICANT: U. Jeffrey Y.
APPLICANT: Li, Hadong
TITLE OF INVENTION: Chemokine Alpha 2
COMMERSPONDENCE ADDRESS:
ADDRESSEE: Sterne, Kessler, Goldstein
   // Sequence 3, Application US/09238184
// Patent No. 6479633
// GENERAL INFORMATION:
   TELEFAX: 202-371-2540
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
  COUNTRY: USA
ZIP: 20005-2934
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
  99 amino acids
  , MOLECULE TYPE: protein US-08-825-556A-3
  Washington
   amino acid
GY: linear
   USA
   TOPOLOGY:
  COUNTRY:
   US-09-238-184-3
   STREET:
   STATE:
```

```
61 RYRGQEHCLHPKLQSTKRFIKWYNAWNEKRRVYEE 95
   , ORGANISM: Human
US-09-724-864-68
   ORGANISM: Mouse
   US-09-312-283C-344
   US-09-312-283C-344
  RESULT 6
US-09-724-864-68
   SEQ ID NO 68
  셤
   ð
   ò
   d
  ð
   ö
  13 MRLLAAALLILLILLALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKYPHCBEKAVIITT 72
  1 MRLLAAALLILLLALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKYPHCEEKWVIITT 60
  17 AAALLILLILALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKYPHCEEKMVIITTKSVS 76
   1 AAALLILLILALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKYPHCEBKMVIITTKSVS 60
  0; Gaps
   0; Gaps
   VENOUR: 98-930-344

VENOUR: 09-188-930-344

VENOUR: 08-188-930-344

VENOUR: 08-188-930-344

VENOUR: 08-188-930-344

VENOUR: 08-188-930-34

APPLICANT: Stemen, James D.

APPLICANT: Stemen, Mathew

APPLICANT: Onrust, Rene

CURRENT ONVENTION: Compositions Isolated From Skin Cells

TITLE OF INVENTION: Compositions

TITLE OF INVENTION: and Methods For Their Use

TITLE OF INVENTION NUMBER: US/09/188,930A

CURRENT APPLICATION NUMBER: US/09/188,930A

CURRENT FILING DATE: 1998-11-09

NUMBER: OF SEQ ID NOS: 348

SOFTWARR: FastSEQ for Windows Version 3.0
  Query Match

86.7%; Score 509; DB 3; Length 95;

Best Local Similarity 100.0%; Pred. No. 9.5e-55;

Matches 95; Conservative 0; Mismatches 0; Indels
  Length 99;
  Query Match 88.9%; Score 522; DB 4; Length 99.
Best Local Similarity 99.0%; Pred. No. 2.6e-56. Indels
Matches 98; Conservative 0; Mismatches 1; Indels
  73 KSVSRYRGQEHCLHPKLQSTKRFIKWYNAWNEKRVYEE 111
  61 KSVSRYRGQEHCLHPKLQSTKRFIKWYNAWNEKRRFYEE 99
COMPUTER: IEM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOPTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/238,184
   77 RYRGOEHCLHPKLOSTKRFIKWYNAWNEKRKYYEE 111
  1488.0850001
   PRIOR APPLICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/825,556
FILING DATE: 19-MAR-1997
APPLICATION NUMBER: US 60/013,653
FILING DATE: 19-MAR-1966
ATTORNEY/AGENT INFORMATION:
NAME: Steffe, Eric K.
REGISTAATION NUMBER: 36,686
REFERENCE/DOCKET NUMBER: 1488.085000
TELECHONNICATION INCOMATION:
   INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 99 amino acids
  TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
   ; TYPE: PRT
; ORGANISM: Mouse
US-09-188-930-344
  US-09-238-184-3
  원
  ઠે
   셤
  à
   В
```

```
ö
  17 AAALILILIALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKYPHCEEKWVIITTKSVS 76
  1 AAALLLILALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKYPHCEEKAVIITTKSVS 60
  17 AAALLILLILALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKYPHCEEKWVIITTKSVS
Parent No. 6380362

Sequence 68, Application US/09724864

Farent No. 6380362

GENERAL INFORMATION James D

APPLICANT: Watson, James D

APPLICANT: Watson, James G

TITLE OF INVENTION: Polynucleotides polypeptides expressed

TITLE OF INVENTION: Dy the polynucleotides and methods for their use.

FILE REFERENCE: 11000.1050U1

CURRENT APPLICATION NUMBER: US/09/724,864

CURRENT APPLICATION NUMBER: US. No. 6380362 60/171,678

PRIOR APPLICATION NUMBER: U.S. No. 6380362 60/171,678

NUMBER OF SEQ ID NOS: 72

SOFTWARE: PastSEQ for Windows Version 4.0
  Sequence 3-34. Application US/09312283C
| Patent No. 6573095
| GENERAL INFORMATION:
| APPLICANT: Watson, James D.
| APPLICANT: Strachan, Lorna
| APPLICANT: Strachan, Matthew
| APPLICANT: Sleeman, Matthew
| APPLICANT: Sleeman, Matthew
| APPLICANT: Murison, James G.
| APPLICANT: Murison, James G.
| APPLICANT: Watson, James G.
| APPLICANT: Watson, James G.
| TITLE OF INVENTION: Compositions Isolated from Skin Cells
| TITLE OF INVENTION: Compositions Isolated from Skin Cells
| TITLE OF INVENTION: And Methods for Their Use
| TITLE OF INVENTION: 11000, 1011c2
| CURRENT APPLICATION NUMBER: US/09/312, 283C
| CURRENT FILING DATE: 1999-05-14
| NUMBER OF SEQ ID NOS: 425
| SOFTWARE: FastSEQ for Windows Version 4.0
  Query Match 86.7%; Score 509; DB 4; Length 95; Best Local Similarity 100.0%; Pred. No. 9.5e-55; Matches 95; Conservative 0; Mismatches 0; Indels
  Query Match 88.7%; Score 509; DB 4; Length 95; Best Local Similarity 100.0%; Pred. No. 9.5e-55; Matches 95; Conservative 0; Mismatches 0; Indels
  77 RYRGQEHCLHPKLQSTKRFIKWYNAWNEKRRVYEE 111
  77 RYRGOEHCLHPKLOSTKRFIKWYNAWNEKRRVYEE 111
  61 RYRGQEHCLHPKLQSTKRFIKWYNAWNEKRRVYEE 95
   61 RYRGQEHCLHPKLQSTKRFIKWYNAWNEKRRVYEE 95
```

```
1 MRLLAAALLILLILLILALCASRVDGSKCKCSRKGPKIRYSDVKKLEMKPKYFHCEEKNVIVIT 60
  13 MRLLAAALLLLLLALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKYPHCEEKMVIITT 72
   0; Gaps
  Sequence 340, Application US/09312283C

Sequence 340, Application US/09312283C

Patent No. 657309S

GENERAL INFORMATION:
APPLICANT: Watson, James D.
APPLICANT: Strachan, Lorna
APPLICANT: Sleeman, Matthew
APPLICANT: Rumble, Krishanand D.
APPLICANT: Rumble, Krishanand D.
TITLE OF INVENTION: Compositions isolated from Skin Cells
TITLE OF INVENTION: and Methods for Their Use
FILE REPREMENCE: 11000.1011c2
CURRENT APPLICATION NUMBER: US/09/312,283C
CURRENT FILING DATE: 1999-05-14
NUMBER: OF SEQ ID NOS: 425

SOFTWARE: FastSEQ for Windows Version 4.0

LENGTH: 99

LENGTH: 99
  GENERAL INFORMATION:
APPLICANT: Watson, James D.
APPLICANT: Strachan, Lorna
APPLICANT: Strachan, Lorna
APPLICANT: Sleeman, Matthew
APPLICANT: Orrust, Rene
TITLE OF INVENTION: and Methods For Their Use
ITILE OF INVENTION: and Methods For Their Use
ITILE OF INVENTION: and Methods For Their Use
FILE REFERENCE: 11000.1011c1
CURRENT PILING DATE: 1998-11-09
NUMBER OF SEQ ID NOS: 348
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 340
LENGTH: 99
   86.2%; Score 506; DB 3; Length 99; 94.9%; Pred. No. 2.3e-54; tive 3; Mismatches 2; Indels
  86.2%; Score 506; DB 4; Length 99; 94.9%; Pred. No. 2.3e-54; tive 3; Mismatches 2; Indels
   73 KSVSRYRGQEHCLHPKLQSTKRFIKWYNAWNEKRRVYEE 111
  73 KSVSRYRGQEHCLHPKLQSTKRFIKWYNAWNEKRRVYEE 111
  61 KSMSRYRGQEHCLHPKLQSTKRFIKWYNAWNEKRVYEE 99
  Sequence 340, Application US/09188930A
Patent No. 6150502
  Query Match
Best Local Similarity 94.98
Marches 94; Conservative
   Query Match
Best Local Similarity 94.94
Matches 94; Conservative
   ORGANISM: Mouse
   ORGANISM: Mouse
  US-09-312-283C-340
RESULT 8
US-09-188-930-340
  US-09-188-930-340
   TYPE: PRT
   ò
  ò
  ò
```

```
1 MRLLAAAILLILALCASRVDGSKCKCSRKGPKIRYSDVKKLEMKFYYPHCEEKMVIVIT 60
  13 MRLLAAALLLLLLALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKYPHCEEKMVIITT 72
  13 MRILAAALILLILLIALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKYPHCEBKMVIITT
   0; Gaps
  0; Gaps
   Sequence 417, Application US/09312283C
Sequence 417, Application US/09312283C
Sequence 417, Application US/09312283C
Senent No. 673095
GENERAL INFORMATION:
APPLICANT: Strachan, Lorna
APPLICANT: Sleeman, Matthew
APPLICANT: Sleeman, Matthew
APPLICANT: Murison, James G.
APPLICANT: Murison J.
STILLE REFERENCE: 11000 101102
CURRENT FILLING DATE: 1999-05-14
NUMBER OF SEQ ID NOS: 425
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 417
LENGTH: 99
                                      Sequence 394, Application US/09312283C
Sequence 394, Application US/09312283C
Sequence 394, Application US/09312283C
Sequence 394, Application US/09312283C
SEREAL INFORMATION:
APPLICANT: Strachan, Matthew
APPLICANT: Sleems, Matthew
APPLICANT: Muxison, James D.
APPLICANT: Muxison, James D.
APPLICANT: Kumble, Krishanand D.
TITLE OF INVENTION: Compositions Isolated from Skin Cells
TITLE OF INVENTION: and Methods for Their Use
FILE REFERENCE: 11000.1011c2
CURRENT FILING DATE: 1999-05-14
NUMBER OF SEQ ID NOS: 425
SOFTHARE: FRASESE for Windows Version 4.0
  Query Match 86.2%; Score 506; DB 4; Length 99; Best Local Similarity 94.9%; Pred. No. 2.3e-54; Matches 94; Conservative 3; Mismatches 2; Indels
  86.2%; Score 506; DB 4; Length 99; 94.9%; Pred. No. 2.3e-54; tive 3; Mismatches 2; Indels
  73 KSVSRYRGQEHCLHPKLQSTKRFIKWYNAWNEKRRVYEE 111
  73 KSVSRYRGQBHCLHPKLQSTKRFIKWYNAWNEKRVYBE 111
   61 KSMSRYRGQEHCLHPKLQSTKRFIKWYNAWNEKRRVYEE 99
  94; Conservative
   Best Local Similarity
  TYPE: PRT
ORGANISM: Mouse
   TYPE: PRT
ORGANISM: Mouse
RESULT 10
US-09-312-283C-394
  US-09-312-283C-394
   US-09-312-283C-417
  SEQ ID NO 394
   Query Match
  Matches
  В
  ਨੇ
   à
   9
```

us-09-978-189-370.rai

```
61 FIKWYNAWNEKRRYYEB 77
  ORGANISM: Human
   US-09-312-283C-346
  ; OKGANISM: MOUSE
US-09-312-283C-346
   RESULT 14
US-09-724-864-72
  US-09-724-864-72
  SEQ ID NO 72
LENGTH: 77
   TYPE: PRT
  g
  ò
   ઠ
  g
  ò
   ò
   13 MRLLAAALLLLLLALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKYPHCEEKMVIITT 72
  35 SKCKCSRKGPKIRYSDVKKLEMKPKYPHCEEKMVIITTKSVSRYRGQEHCLHPKLQSTKR 94
  1 SKCKCSRKGPKIRYSDVKKLEMKPKYPHCEEKNVIITTKSVSRYRGQEHCLHPKLQSTKR 60
  1 MRLPAAALLLLLALYTARVDGSKCKCSRKGPKIRYSDVKKLEMKPKYPHCEEKMVII-T 59
   0; Gaps
   85.9%; Score 504.5; DB 4; Length 98; 98.0%; Pred. No. 3.5e-54; tive 0; Mismatches 1; Indels 1
  Sequence 346, Application US/09188930A

Sequence 346, Application US/09188930A

Parent No. 6150502

GENERAL INFORMATION:
APPLICANT: Strachan, Lorna
APPLICANT: Strachan, Lorna
APPLICANT: Stream, Matthew
APPLICANT: Minison, James Greg
TITLE OF INVENTION: Compositions Isolated From Skin Cells
TITLE OF INVENTION: and Methods For Their Use
FILE REPERENCE: 11000.1011c1
CURRENT APPLICATION VIWERE: US/09/188,930A
CURRENT APPLICATION NUMBER: 1998-11-09
NUMBER OF SEQ ID NOS: 348

SOFTWARE: Reserve for Windows Version 3.0

SEQ ID NOS: 346
   Sequence 418, Application US/09312283C
Sequence 18, Application US/09312283C
Sequence No. 6573095
Sequence No. 657
   Query Match 72.9%; Score 428; DB 3; Length 77; Best Local Similarity 100.0%; Pred. No. 5.9e-45; Matches 77; Conservative 0; Mismatches 0; Indels
  73 KSVSRYRGQEHCLHPKLQSTKRFIKWYNAWNEKRRVYEE 111
    61 KSMSRYRGQEHCLHPKLQSTKRFIKWYNAWNEKRRVYEE 99
   60 KSVSRYRGQEHCLHPKLQSTRRFIKWYNAWNEKRRVYEE 98
  95 FIKWYNAWNEKRRVYEE 111
   Best Local Similarity 98.09
Matches 97; Conservative
  TYPE: PRT
ORGANISM: Mouse
   ORGANISM: Human
  US-09-312-283C-418
  RESULT 12
US-09-312-283C-418
   RESULT 13
US-09-188-930-346
  US-09-188-930-346
   SEQ ID NO 418
   Query Match
엄
   a
   8
  g
   ଚ
```

```
1 SKCKCSRKGPKIRYSDVKKLEMKPKYPHCEEKWVIITTKSVSRYRGQEHCLHPKLQSTKR 60
  35 SKCKCSRKGPKIRYSDVKKLEMKPKYPHCEEKWVIITIKSVSRYRGQEHCLHPKLQSTKR 94
  35 SKCKCSRKGPKIRYSDVKKLEMKPKYPHCEEKWVIITTKSVSRYRGQBHCLHPKLQSTKR 94
  1 SKCKCSRKGPKIRYSDVKKLEMKPKYPHCEEKMVIITTKSVSRYRGQEHCLHPKLQSTKR 60
   Query Match 72.9%; Score 428; DB 4; Length 77; Best Local Similarity 100.0%; Pred. No. 5.9e-45; Matches 77; Conservative 0; Mismatches 0; Indels 0; Gaps
Sequence 72, Application US/09724864

Sequence 72, Application US/09724864

Patent No. 6380362

GENERAL INFORMATION:
APPLICANT: Watson, James D.
APPLICANT: Watson, James G.
TITLE OF INVENTION: Pythocleotides, polypeptides expressed
TITLE OF INVENTION: by the polymucleotides and methods for their use.
FILE REPERENCE: 11000.105010

FILE REPERENCE: 11000.105011

CURRENT APPLICATION NUMBER: U.S. No. 6380362 60/171,678

PRIOR APPLICATION NUMBER: U.S. No. 6380362 60/171,678

NUMBER OF SEQ ID NOS: 72

SOFTWARE: PastSEQ for Windows Version 4.0
   APPLICANT: Strachan, Lorna
APPLICANT: Steaman, Matthew
APPLICANT: Steaman, Matthew
APPLICANT: Steaman, Matthew
APPLICANT: Chrust, Rene
APPLICANT: Murison, James G.
TITLE OF INVENTION: Compositions Isolated from Skin Cells
TITLE OF INVENTION: Compositions Isolated from Skin Cel
   Length 77;
   0; Indels
   72.9%; Score 428; DB 4; Lo
100.0%; Pred. No. 5.9e-45;
ative 0; Mismatches 0;
  ; Sequence 346, Application US/09312283C; Patent No. 6573095; GENERAL INFORMATION:
   95 FIKWYNAWNEKRRVYEE 111
  95 FIKWYNAWNEKRRYYEE 111
   61 FIKWYNAWNEKRRVYEE 77
  61 FIKWYNAWNEKRRVYEE 77
  Conservative
   Query Match
Best Local Similarity
---a 77; Conserva
```

Search completed: April 22, 2004, 12:34:55 Job time: 23 secs

s A